

OPINIONS OF THE PRESS.

Manchester Guardian :—

“It would be difficult to name a book of the same moderate size and price which so excellently fulfils the promise of its title.”

Daily Chronicle :—

“The chapters on foreign exchanges form one of the clearest and most intelligible expositions of this intricate subject which we have ever seen.”

Financial News :—

“Mr. Clare has undertaken to explain to persons with common intelligence, and without expert knowledge, an ordinary ‘money article’; and he has succeeded à merveille.”

Daily News :—

“Each section is set forth and explained in a very lucid and practical manner, capable of being understood even by the novice in finance, whilst there is useful information for all.”

Athenaeum :—

“This work should enable our business men to obtain a knowledge of this class of transaction, which few now possess.”

Journal of the Institute of Bankers :—

“For the first time, both facts and theory are here set forth in a manner that leaves nothing to be desired either in point of clearness or completeness.”

Commercial and Financial Chronicle (New York) :—

“While professing in his title to give only a ‘primer,’ Mr. Clare has in reality brought forward all the great principles upon which the most learned and philosophical writer on banking, as it is known in England, would base his speculations.”

SECOND EDITION.

A MONEY-MARKET PRIMER

AND

KEY TO THE EXCHANGES

WITH DIAGRAMS.

BY

GEORGE CLARE

RECOMMENDED BY THE COUNCIL OF THE INSTITUTE OF BANKERS



LONDON:
EFFINGHAM WILSON AND CO.,
11, ROYAL EXCHANGE.

1898.

EFFINGHAM WILSON AND CO.,
11, ROYAL EXCHANGE, LONDON, E.C.

INTRODUCTORY.

In the following pages an attempt is made to present, in brief compass and in plain untechnical language, a general view of the London Money Market, and of the elements that combine to determine the value of loanable capital in this country.

As the object aimed at is simply to make the reader acquainted with those rudimentary facts and principles, a knowledge of which is essential to the right understanding of an ordinary "money article," the writer makes no pretensions to originality, but has merely endeavoured to collect and arrange such of the widely-scattered information bearing on the subject as will, he believes, render those who "inwardly digest" it able to follow and appreciate the meaning of the City Editor's pros and cons.

The scope of the work is to point out and elucidate the influences that conduce to the rise or fall, firstly, of the Bank-rate of discount, and secondly, of the market-rate. Beginning with the former, we pass in review each item of the weekly account issued by the Bank of England, noticing how the normal variations arise, how they are affected by the state of credit, and what evidence they afford of that ebb and flow in the demand for loanable capital, the movements of which are reflected in the ever-changing price of "money." Of these figures those which record the amount of cash held by the Banking Department are of course the most significant; and as it is well known that the relative weakness or

strength of this item is the main incentive to action on the part of the Bank, the Reserve has been subjected to detailed analysis, with the result of demonstrating that there exists a much closer connection than might be imagined between the Bank's gain or loss of gold on foreign account and the variations of the advertised rate.

In view of such connection gold movements themselves claim attention, and, in order to gain a clear insight into their causes and antecedent conditions, the working of the Foreign Exchanges is next investigated. It is investigated, moreover, at some length, there being reason to believe that no branch of commercial knowledge is in general more imperfectly understood. By treating it, however, in a more practical manner than is usually the case, and by associating the enunciation of principles with illustrations of their application, the writer, who has actual experience to guide him, trusts he has succeeded in bringing the intricacies of the subject within the grasp of any ordinary intelligence.

Finally, the leading features of the open market are described and explained; what loanable capital consists of, whence it comes, how it is disposed of, and how its value is settled, being, with other such, the questions to which it is sought to furnish a reply.

Wherever it appeared necessary, diagrams have been introduced to simplify explanation. These are made up from figures taken from the *Economist*, and have been carefully checked:

From beginning to end the writer has confined himself, as far as possible, to statements of fact, and to the inferences that seem fairly deducible therefrom, leaving all matters of mere speculative theory to be dealt with by those who are better able than himself to do them justice. Moreover, he has even resisted the temptation of attempting an answer to "What is money?"—a problem which seems almost as far from satisfactory and concise solution as the famous query propounded by "jesting Pilate."

April, 1891.

PREFACE TO SECOND EDITION.

A SECOND edition having been called for, the writer has taken the opportunity of subjecting his work to a vigilant revision, and of elucidating the text by the addition of further diagrams and of a number of explanatory footnotes. A chapter has also been added on the American currency problem, the development of which is now attentively watched by business men in view of its important bearing on the silver question.

The writer has the gratification of stating that the *Money-Market Primer* has been included in the list of books recommended by the Council of The Institute of Bankers.

September, 1892.

CONTENTS.

PART I.

THE BANK OF ENGLAND, AND THE BANK-RATE.

CHAP.		PAGE
I.	Circumstances of the Bank's foundation.—Its original capital and how it was invested.—Was a political organisation.—Its note-issue a success.	1
II.	The Acts of 1703 and 1826.—Has the exclusive monopoly of the London circulation.—The Act of 1844 (the "Bank Act").—Is the bank of the State, but not a State bank.—Is also the Bankers' Bank.—Keeps the country's stock of bullion.	5
III.	Had no rivals until 1834.—Its influence over the money market explained.—The inter-dependence of Bank-rate, market-rate, and deposit-rate.—Fluctuations of Bank-rate since 1834.—The ten-year theory of panics.—The Bank Return.	7
IV.	ISSUE DEPARTMENT.	
	I. Causes that led to the passing of the "Bank Act" of 1844.—How it affected the Bank of England.—How it affected the Country Bank.—Circulation and deposits then and now.	12
	II. Particulars of the Bank's issue against securities.—Its issue against gold.—Its profit on the issue.—The suspensions of the Act.—How the issue of the Imperial Bank of Germany is regulated.—The Bank of England Note as a legal tender.—Its chief uses, and why the circulation is falling off.—The average circulation.—The ordinary movements of the circulation do not affect the value of money.—Exceptional movements produce exceptional effects.	15
	III. Particulars of the Bank's issue against gold.—The Bank must give notes for gold, as well as gold for notes.—The "Bank-price" of gold, and the "Mint-price."—Makes a profit on the sale of bars.—Improbability of a "run" on the Issue Department.—Could a "run" be met?	20
V.	BANKING DEPARTMENT.	
	I. Is simply an ordinary bank; but has to publish a weekly balance-sheet.—The Capital and Reserve; their magnitude, and the unrivalled security they offer to depositors.	24

Contents.

xi.

CHAP.	PAGE
II. <i>Public Deposits.</i> —The national receipts and payments, and the nation's cash balance.—How the payment of Queen's Taxes affects the accounts ; increasing the Public Deposits, the Reserve, and the Other Securities, and diminishing the Other Deposits.—The effect produced on the market-rate of discount.—Temporary loans to Government to meet the dividends.....	25
III. <i>Other Deposits.</i> — What they consist of.—Are a measure of the supply of loanable capital.—The Bank of England is the Bankers' Bank, and keeps the ultimate banking-reserve of the whole country.—The daily fluctuations are principally caused by variations in the supply of floating money.....	28
IV. The average amount.— The increase at the end of the half-year explained.—Effect of crisis on the Other Deposits.—The movements of the bankers' balances in 1875 ; and of the Other Deposits in 1878, 1885, and 1890.....	31
V. The Bank endeavours to attract gold by raising its rate.—To raise Bank-rate is of no use unless the market-rate goes up as well — The Market-rate is adjusted by the equation of supply and demand.—The Other Deposits are a gauge of the supply.—If the supply is excessive a high Bank-rate is ineffectual.—Repeated advances of the Bank-rate are not advisable in ordinary times.— If necessary the Bank borrows the excess-supply.—The effect of this measure.— An instance that occurred in 1888.—Another method of controlling the market might be to pay interest on Deposits.—Arguments <i>pro</i> and <i>con</i> .—The great difficulty would be to keep up a sufficient Reserve.	33
VI. BANKING DEPARTMENT (<i>Continued</i>).	
The Bank's investments.—Movements in the item of Government Securities, and their meaning.— What the Other Securities consist of.—The average amount.—The Bank's discount-business is probably small in proportion to its means.— Its advances are mostly by way of loans against security.—The bill-brokers borrow from it to meet temporary demands.—Effect of crisis on the Other Securities.	41
VII. THE RESERVE.	
I. As the Bank must pay its debts in gold, if required, the Reserve is the basis of its credit.—The Reserve has nothing to do with the Bank-note.—How and why an export of gold affects it.	45
II. If the Reserve were lost, the whole nation would be bankrupt.—All debts are payable in gold.—Bankers' debts alone vastly exceed our entire stock of gold.—What a banker's reserve consists of.—All the banks in the country are dependent on the Reserve.	48
III. The Bank has never undertaken to keep up a national reserve.—The interests of its stockholders are opposed to a large reserve.—Other banks lend their money to the Bank of England, because they know the Government will assist it in case of need, and because they expect to be assisted in turn.	51

CHAP.	PAGE
IV. The average amount of the Reserve.—Its fluctuations.—Its proportion to Deposits.—Whenever more currency is wanted the Bank has to supply it.—The uses of gold and notes.—Under what circumstances those uses expand.—The fluctuations of the internal gold circulation.—Effect of the Income-Tax collection.—The Scotch withdrawals in May and November explained.—The fluctuations of the currency as a whole.—Normal movements of the currency rarely affect the Bank-rate.....	53
V. An exceptional demand for currency may cause a panic.—The great defect of the Bank Act.—What is credit?—Effect of a failure of credit.—Crisis.—The remedy.....	57
VI. The crises of 1857 and 1866.—The sequel of a crisis.....	62
VII. Foreign demands on the Reservoir.—Their importance.—The Bank's business in bar-gold and foreign coin.—The external gold movements are the key to the Bank-rate.....	67

PART II.

THE FOREIGN EXCHANGES.

VIII.—I. How international trade-dealings are settled.—The theoretical Par of Exchange, and the Mint Par.—A mint-par can only be established between countries that have the same standard.....	72
II. Why the exchanges are constantly fluctuating —Explanation of a premium on the exchange.—How and to what extent scarcity of bills causes a rise in price.—The "Foreign Bankers."—How they cover their drafts.—What is Specie Point?—Difference between Specie Point and Mint Par.—Specie Point cannot be determined with exactness.	75
III. The business in foreign bills.—How the rates of exchange are quoted here.—The general rule is to state the exchange as it is stated abroad.—The rise of a rate expressed in foreign money is equivalent to a fall in price, and vice-versa. — Favourable and unfavourable exchanges.—High rates are for us, and low rates against us.	79
IV. The London Rates of Exchange are mostly for three-months' bills.—The "long" rate is the "cheque" rate plus interest.—Is the interest to be taken at the foreign bank-rate or the foreign market-rate?—The state of credit as a factor in the long rate.....	82
IX.—I. What is meant by a rise or fall of the exchange.—Difficulty of following fluctuations from the London quotations.—The relationship between money and the exchanges —It is rarely possible to assign a movement of the exchange to its specific cause.—The rate is always in favour of the country that has to receive on balance. — International indebtedness as a regulator of the exchanges.—The impossibility of estimating it.	87

Contents.

xiii.

	PAGE
CHAP.	
II. The principal European exchanges are regulated chiefly by the relative value of money.—The reason why.—Bills of exchange as an investment for floating funds.—How interest is earned on a foreign bill.—When the London market-rate is above the Continental level, bankers abroad buy London bills as an investment and turn the exchanges in our favour.—Arbitrage operations keep the exchange at the same level on both sides.	93
III. Instances of the effect produced by a difference between the rates of interest in London and Paris.—Bankers abroad only buy London paper for investment when credit is good here.—High interest is no attraction if credit is bad.—The effect on the exchanges of a given difference in the discount-rates is not always the same.	100
IV. Why an advance of Bank-rate is expected to bring gold to the country.—“International” securities are also available as a means of remittance.—A high exchange tempts speculation for the fall.—A high Bank-rate invariably attracts gold at last.—As soon as gold arrives the market-rate gives way, and the exchanges follow.	103
V. The money-market is only affected by the exchanges of such countries as give or take gold.—Instances of exchanges that do not fulfil this condition.—The chief gold-exchanges.—Most of the exchanges are always in our favour.—How the numerous withdrawals from the Bank are to be explained—Exceptional imports.	107
X. THE PARIS EXCHANGE.	
I. Mint Par.—Specie Points.—The French cheque-rate frequently rises beyond Specie Point.—The obstruction to an outflow of gold.—Reasons why the Bank of France is unwilling to part with gold.—How applications are dealt with.—A premium on gold modifies the Specie Point.—A high premium makes it profitable to export French coin.—The effective limits to the French exchange.—The objections to a premium.—Why the Bank of France does not alter its discount-rate, which is practically fixed.	110
THE BERLIN EXCHANGE.	
II. Mint Par.—Specie Points.—The Reichsbank never absolutely refuses gold, but puts pressure on the banks to prevent exports.—Account of a gold-shipment, showing how Specie Point is arrived at.—The policy of the Reichsbank in regard to imports of gold.	115
XI. THE NEW YORK EXCHANGE.	
I. There is no State Bank at New York.—The Central Reserve Cities.—The Associated Banks of New York and their compulsory cash-reserve.—An outflow of currency to the interior, or an absorption of currency by the Treasury are the chief causes of a drain on the New York reserve.—The Country Banks keep a balance at New York, and draw on it whenever more currency is wanted.—How the New York banks replenish their reserves if necessary.—The revenue collection.—The Secretary of the Treasury acts as his own banker.—As income largely exceeds expenditure, and as the	

CHAP.	PAGE
I. Government balance may only be used for Government purposes, there is constant difficulty in preventing a dangerous lock-up of currency.—The fiscal policy of the United States.....	118
II. The currency system of the United States.—The Bland Bill of 1873.—Use of the Silver Certificate.—The Silver Bill of 1890.—Present aspect of the currency-problem	123
III. The Mint Par.—Specie Points.—Illustration of a Specie Point.—The items that effect the exchange.—The relative value of money produces little effect.—The ratio is usually against us in the autumn.—Differences of indebtedness are generally settled by a transfer of securities.....	129

PART III.

THE OPEN MARKET.

XII.—I. The price of "money" varies more than that of any other commodity.—What the price is dependent upon —Market-money is other people's money.—The magnitude of the loan-fund.—How bankers employ their deposits.—As bills run off other bills are bought to replace them.—The ratio on any given day between the bills that run off and the new paper tendered for discount decides the rate.—The effect of "new" money.—What demand consists of.—It is dependent on the state of trade.—Improvement of trade produces a relative as well as an actual increase of demand.—Scarcity of bills.—The connection between Bank-rate and market-rate.—Influence of credit on the market-rate.....	133
II. <i>The bill-brokers and discount-companies.</i> —Nature of their business.—Why bankers buy bills from the brokers, instead of dealing direct with holders.—All the best paper in the country comes to Lombard Street.—The brokers' business in "day-to-day," or "call" money.—As they pay interest on all their borrowed money they cannot afford to keep a large reserve.—Short deposits.—When the market-rate of discount is much below Bank-rate, the brokers may have to allow as much (or more) on deposits as they charge on bills. Who is responsible for unduly depressing the market-rate?	141
III. <i>Loans on the London Stock Exchange.</i> —Bankers employ the greater part of their money in Loans and Advances.—Why so much is lent on the Stock Exchange.—How a loan is managed.—Who borrows the money, and what it is borrowed for?—What a "contango" is, and how it is fixed.—Why the price of "money" influences the price of stocks.	145

LIST OF DIAGRAMS.

THE BANK OF ENGLAND

AND

BANK-RATE.

CHAPTER I.

THE Charter of Incorporation of the Society denominated the Governor and Company of the Bank of England—the first joint-stock banking association ever established in this country, and the foremost in stability, magnitude, and importance of the great financial institutions of the world—dates close upon two centuries back, from the 27th day of July, 1694; and as “the Bank” is the parent of the modern banking system, a short account of the circumstances that led to its formation will not be out of place as an introduction to our subject.

In 1694 the Government of William III was in great straits for want of money to carry on the war with France. Six years previously James II had been expelled from his throne and country, on the ground that he had broken the fundamental laws of the kingdom; but with the aid of Louis XIV, at whose court he had found refuge, had since been making strenuous endeavours to evict his Protestant son-in-law, and to re-establish his own sovereignty and the dominion of the Church of Rome. William on his part was vigorous in defence of his crown, and was freely seconded in his efforts by Parliament, which

voted supplies with great liberality, and had imposed taxation to an extent hitherto unheard of. But though the country already found its burden almost beyond endurance, more money was still an imperious necessity.

Under these circumstances a question of principle was raised, that has since been revived on many similar occasions of extra-ordinary expenditure. Seeing, it was said, that posterity will reap the chief benefit of our struggle for popular rights and religious toleration, why not let posterity settle the bill? Why trouble to pay as we go? That a public loan would be both expedient and just, was, in fact, admitted by all; and the Chancellor of the Exchequer was but too willing to borrow. But an obstacle lay in the way; and an obstacle that appeared insuperable. Where were lenders to be found? Was it likely that anyone would trust his money to a Revolutionary Government, that had only been established six years, and might be overturned as a result of the next campaign?

At this conjuncture, however, the strong religious and political convictions of a part of the community came to the help of the country. In the City of London there were many wealthy men—Dissenters mostly—who were willing, rather than see the land once more delivered into bondage, to place their whole fortunes at stake; and among these merchants a scheme now began to find favor that had been perseveringly put forward by a Scotchman, William Paterson, but to which they had hitherto turned a deaf ear. His plan was to apply the joint-stock principle to the business of banking, and out of the capital raised for that purpose to grant a loan to the Government. The proposal on discussion speedily took definite shape, and passed in due course from the City to the Houses of Parliament, where it was settled and sanctioned.

It was proposed to raise £1,200,000 by public subscription, and to *lend the whole* of it to Government at eight per cent. interest, the lenders to be incorporated by Royal Charter,^a and to have power to issue notes on Government security to the extent of the sum lent. The idea of putting all their eggs in one basket was probably not quite relished by intending subscribers, but the capital was nevertheless soon raised. In those days good investments were, after all, a rarity; and the new undertaking, backed up as it was by the guarantee of a government that seemed honestly bent on paying its way, and supported by the best-known merchants of the City of London, appealed with success to the sentiments and to the pockets of capitalists, and by its happy combination of patriotism with eight per cent., gratified at once their love of country, their love of gain, and their hatred of tyranny and Popery.

It is worthy of notice that this loan to the public of £1,200,000, besides being the foundation-stone of the Bank of England, is also the starting-point in the history of the Funded Debt of this country.

In its inception the Bank of England was something more than a business enterprise. Not only was it a finance company; it was also a political organisation. The Governor and Directors were all Whigs, and so were most of the subscribers, the Tories as a body having abstained from any support of the new-fangled scheme, which they viewed with suspicion and dislike.

"During several generations," says Macaulay, "the Bank of England was emphatically a Whig body. It was Whig, not accidentally, but necessarily. It must have instantly stopped payment if it had ceased to receive the interest on the sum which it had advanced to the

^a The Charter granted limited liability, which was at that time a highly valued and rarely conferred privilege.

"government; and of that interest James would not have
"paid one farthing. . . . So closely was their
"interest bound up with the interest of the government
"that the greater the public danger the more ready were
"they to come to the rescue. In old times when the
"Treasury was empty, when the taxes came in slowly, and
"when the pay of the soldiers and sailors was in arrear, it
"had been necessary for the Chancellor of the Exchequer
"to go, hat in hand, up and down Cheapside and Cornhill,
"attended by the Lord Mayor and by the Aldermen, and
"to make up a sum by borrowing a hundred pounds from
"this hosier, and two hundred pounds from that iron-
"monger. Those times were over. The government,
"instead of laboriously scooping up supplies from numerous
"petty sources, could now draw whatever it required from
"an immense reservoir, which all those petty sources kept
"constantly replenished. It is hardly too much to say
"that, during many years, the weight of the Bank, which
"was constantly in the scale of the Whigs, almost counter-
"balanced the weight of the Church, which was as con-
"stantly in the scale of the Tories."

The note-issue of the new bank was favoured by circumstances. The coinage being both deficient and hopelessly bad, there was a real want of circulating medium; and, as no reasonable doubt could be entertained of the solvency of an institution possessing so wealthy a body of shareholders, its notes were from the very outset readily taken, and the new enterprise soon became an assured success.

CHAPTER II.

THE first landmark in the history of the Bank is the Act of 1708, which made it unlawful for any association of more than six partners to carry on banking business in England and Wales, and practically invested the Bank with a monopoly of joint-stock banking.^a The injurious effects of this measure, which for over a century confined banking in England to the narrow limits of private enterprise, were submitted to by the country until 1826, when it was repealed, the Bank being compensated by the reduced privilege of being the only joint-stock bank of issue within sixty-five miles of St. Paul's. To our modern ideas this prerogative appears of little value; but in those days, when deposits were few and notes many, the exclusive monopoly of the metropolitan circulation conferred unquestioned predominance over all other banks.^b

The next notable intervention of Parliament was in 1844, when the drastic measure known as the "Bank Act," was made law. This Act regulates the power of issue of all banks in England and Wales, including the Bank of England. Its object was to effect the ultimate extinction of the Country Note, to supplant it by the Bank of England Note, and to make the latter "as good as gold." Its provisions as regards the Bank of England are referred to more fully hereafter.

From the day of its foundation down to the present time the Bank of England has discharged a double function. It is the bank of the State, as well as one of the banks for the public. It transacts the entire banking business of Government, receiving its revenue from the collectors all over the country, paying all outgoings, managing the public debt, issuing Exchequer and Treasury Bills, and advancing money when expenditure temporarily overtakes income.

^a As the Bank frequently obliged the Government by lending to it when no one else would have lent, the Government in return favored the Bank by freeing it from the danger of threatened competition.

^b Compare the predominance which the monopoly of note issue in France (where banking generally has not yet attained the more advanced "deposit" stage) gives to the Bank of France.

But, although the Bank is thus in intimate connection with Government, it is far from being a State Bank,^a in the sense in which the term applies to such as the Imperial Bank of Russia;—and yet, at the same time, it is something more than a mere private banking corporation, like the Union Bank of London. Perhaps its position is best described as being midway between the two, partaking of the prestige of the one and of the liberty of action of the other.

It also stands in an exceptional relationship to other banks. Its unquestionable stability, “equal to that of the ‘British Government,’ as Adam Smith says, has led them to entrust their reserves of cash to its guardianship, and the strange anomaly is exhibited of a bank making unrestricted use, free of interest, of millions of money belonging to its competitors in the same line of business.

Circumstances have likewise made the Bank of England the sole repository of our stock of bullion. Anyone has a right to take gold-bullion to the Mint and to ask for sovereigns in exchange at the rate of 77/10 $\frac{1}{2}$ per ounce standard; but as the Bank is compelled by the Act of 1844 to buy all that may be offered to it at the rate of 77/9, the difference of 1 $\frac{1}{2}$ d. per ounce would barely cover expenses, and in practice all bullion-shipments to this country are consigned to the Bank.^b

The Bank of England is thus the focus of the monetary system of the country, and, as the repository of the Government balance, of the bullion-reserve, and of the ultimate banking-reserve, is invested with a certain stateliness and dignity of standing, which place it *hors de concours*, and which restrain it from working, as other banks do, solely with a view to dividend-earning.

^a Except in so far as the management and regulation of the issue of notes is concerned, in which matter the Bank may be regarded as acting on behalf of the State.

^b Shipments arriving when there is a demand for export are, however, usually sold without the intervention of the Bank, the difference of 1 $\frac{1}{2}$ d. being divided between buyer and seller.

CHAPTER III.

FOR almost a century and a half the Bank of England was the undisputed monarch of the money-market, but the establishment of joint-stock banks in London, beginning with the London and Westminster Bank in 1834, brought powerful rivals into the field, who, by offering to pay interest on deposits—a practice which the Bank resolutely sets its face against—attracted to themselves immense sums many times in excess of their capital, and were thus enabled to contest its supremacy on nearly equal terms. Its influence is accordingly on the wane; but, notwithstanding the immensity of the funds at the disposal of its competitors, it still maintains a powerful hold over the market. The reason why has been explained by Mr. Bagehot: “At all ordinary moments there is not money enough in Lombard-street to discount all the bills in Lombard-street without taking some money from the Bank of England. As soon as the Bank-rate is fixed, a great many persons who have bills to discount try how much cheaper than the Bank they can get these bills discounted. But they seldom can get them discounted very much cheaper, for, if they did, everyone would leave the Bank, and the outer market would have more bills than it could bear.”—*Lombard-street.*

One reason then why the Bank still has so powerful a voice in fixing the value of money is that the stock which she herself holds forms an essential part of the general supply. Another reason is that depositors in the banks look to the official rate as a standard of value. If Bank-rate be three and a half p. c., they expect to get two p. c.

and if they could not obtain it at one bank would try another. Consequently, the advertised deposit-rate rises and falls with the advertised Bank-rate. But the price that a banker pays for the money he borrows will necessarily affect the price at which he lends ; and, if the deposit-rate be two per cent., his discount charge will usually be as far above two per cent. as he can venture to go without driving his customers into the hands of competitors.

The discount-rate of the open market, or price at which dealers will lend money, is determined therefore, to a great extent, by the deposit-rate, or price at which they borrow, and the deposit-rate is more or less dependent on the Bank-rate. If bankers paid interest on all the money they hold this correspondence would be very close, but much of their funds consists of balances to the credit of current-accounts, on which they pay little or nothing.

“Bank-rate,” or the “Bank of England Minimum Rate of Discount,” is theoretically the lowest rate at which the Bank will discount approved bills of exchange, or make advances on mercantile securities for short periods, and up to 1878 was the actual minimum ; but the Bank then adopted the practice, which has since been adhered to, of discounting for regular customers (those who keep their regular banking account there) at market rates, in order to place them on as favorable a footing as the customers of other banks.

Changes in the Bank-rate depend, roughly speaking, on the proportion which the Reserve of notes and coin in the Banking Department bears to the total amount of Deposits. This proportion fluctuates between thirty and fifty per cent., and averages about forty-three per cent. When the Reserve falls to a point at which it is deemed advisable to adopt protective measures the rate is raised ; when, on the other hand, the necessity for protecting the Reserve no

longer exists, and the Bank finds its discount business falling off, because competitors can outbid it, then the rate is lowered again. The proportion which the Reserve should at any time bear to deposit-liabilities—the point, that is to say, at which safety ends and danger begins—is determined not by any hard-and-fast rule, but by the circumstances of the moment and by contingencies within the knowledge of the directors, who are at all times in possession of a mass of information that never reaches the public.

Years of high average Reserve are years of low average Bank-rate, and years of high average Bank-rate are years of low average Reserve.

A peculiarity of the rate is that it attains a higher level in the winter season than in the summer, and also, as a rule, in the second half of the year than in the first half, the reason being that in the autumn and early winter months money is in demand to pay for harvest work in the United Kingdom, for holiday-making among the well-to-do, and for the importation of corn and cotton, &c. For the ten years, 1881-90, the mean winter rate (October—March) averaged £1 2s. per cent. higher than the mean summer rate (April—September).

The fluctuations of the Rate since the passing of the Bank Act are shown in the opposite diagram.

The narrow limits within which the average now moves compare strikingly with the violent fluctuations of the first half of the period. In this respect the panic-years are very noticeable. The periodicity of panics (1847, 1857, and 1866, as well as 1837 and 1825) formerly gave rise to a notion that, owing to the action of some undiscovered economic law, five fat years in the money-market were to be followed by five lean years, and that panics moved in decennial cycles; but it is now recognised that their periodicity was a mere coincidence, and that they were due

to a want of promptitude in taking steps to defend a dwindling reserve. The ratio, for instance, which the reserve bore to liabilities in 1844-6 was 50 $\frac{1}{2}$ per cent., and in 1847 fell to 38 per cent.; in 1852-6, was 47 per cent., and in 1857 fell to 30 per cent.; and in 1861-5 was 40 per cent., against 30 per cent. for 1866. Since 1866 the mean proportion has never again been suffered to fall so low, and has averaged about 43 per cent.

By the Act of 1844 the Bank is ordered to transmit to the Commissioners of Stamps and Taxes for publication in the London *Gazette* "an account of the amount of Bank of England Notes issued by the issue department of the Bank of England, and of gold coin and of gold and silver bullion respectively, and of securities in the said issue department, and also an account of the capital stock, and the deposits, and of the money and securities belonging to the said governor and company in the banking department of the Bank of England."

This account, known as the "Bank Return," is laid before the directors at their weekly meeting on Thursday morning, and is afterwards made public. Its details are always interesting to men of business, and in critical times its appearance is awaited with anxious impatience, as the information it contains will either allay or aggravate apprehension of danger. The Return also does duty as a balance-sheet, which the Bank never publishes. The following is the one for the week ending December 31st, 1890:—

BANK OF ENGLAND.

An ACCOUNT pursuant to the Act 7th and 8th Victoria, cap. 32, for the Week ended on Wednesday, December 31st, 1890.

ISSUE DEPARTMENT.

Notes issued	£39,193,345	(Government debt	£11,015,100
		Other securities	5,434,900
		Gold coin and bullion	22,743,345
	£39,193,345		£39,193,345

BANKING DEPARTMENT

Proprietors' capital ..	£14,553,000	Government securities ..	£9,806,433
Rest	8,241,083	Other securities	33,178,856
Public deposits*	6,824,359	Notes	14,079,175
Other deposits.....	32,990,230	Gold and silver coin ..	722,489
Seven-day & other bills	178,281		
	£57,786,953		£57,786,953

* Including Exchequer, Saving Banks, Commissioners of National Debt, and dividend accounts.

Dated January 1st, 1891.

F. MAY. CHIEF CAUHIER.

In accordance with the above-quoted clause of the Bank Act, the items are arranged under the two heads of Issue Department and Banking Department, the former giving particulars of the circulation and the latter of the general liabilities and assets.

CHAPTER IV.
ISSUE DEPARTMENT.

I.

WHEN the British public speculates and loses, it is very apt to lay the blame not so much on its own want of prudence as on the shortcomings of others. Usually Government is made the scapegoat; but sometimes public opinion is very severe upon loan-mongers and company-promoters, at other times upon the system of time-bargains, and so on.

Such was also the case prior to 1844. In the crash that followed on a speculation in corn or stocks some of the provincial bankers were generally to be found among the victims; and the unfortunate holders of their notes, seeing themselves in possession of mere worthless pieces of paper, raised the specious cry of "Overissue," and demanded Government interference. The grievance was taken up by the country. The banks, it was maintained, had been at the bottom of all the mischief; for, by putting into circulation more paper than was required for the transaction of business, they had produced a redundant currency, leading to high prices, speculation, and crisis. On the other side it was contended, however, that the theory of "overissue" was a mistake, and that there could be no excessive issue of paper money so long as it was convertible at will into coin; or, in other words, that it was impossible to make a man carry a ten-pound note about with him in his pocket if he only wanted £5 in paper. Only make sure, they said, that every note issued shall be paid on presentation, and the circulation may safely be left to take care of itself.'

This was the common-sense view of the matter; but, nevertheless, it was upon the assumption, then entertained by business men of great experience, that excessive issues of bank-notes were the main cause of the continually recurring panics, that the provisions of the Bank Act of 1844 were made law.

Up to that time every banker had the right to issue notes to any extent: the sole condition imposed by law being that he should pay them in cash on demand, or, in default, become bankrupt. But whether or not he maintained a sufficient reserve of cash to ensure convertibility was left entirely to his own judgment and sense of rectitude, the consequence being that in many instances bankers grossly abused their privilege, and, when opportunity offered, increased their issues to an unjustifiable extent.

It was accordingly determined by Sir Robert Peel to assert the broad principle that the right of regulating the issue of currency rests with the State,^a and to overhaul the entire system of note issue, or, as the Act says, "to regulate the issue of bills or notes payable on demand." Adopting a suggestion of Lord Overstone, who was then the greatest living authority on banking, he began by ordering the Bank of England to keep its business as a Bank of Issue wholly distinct for the future from the general banking business, and to carry on the same in a separate department, which he entitled "The Issue Department of the Bank of England." There was to be no mixing up of accounts, but, in the weekly statement rendered to Government, the liabilities and assets of the two departments were to be shown apart.

As a liability, the new department was to take over all the Bank of England notes then in circulation, and, as

^a On the ground that, as bank-notes formed part of the national currency, and were practically irrefusible, it was proper to treat them as being not private, but public, instruments.

assets, securities to the amount of *fourteen millions* and precious metals for the balance.^a

The issues of other banks (of England and Wales) were treated with a view to eventual extinction. No new bank of issue was thenceforth to be established, and those then existing were forbidden, under heavy penalties, to exceed a certain maximum, corresponding to the average amount which they were respectively able to keep in circulation in the early part of 1844.^b A bank that suspended its issue could not afterwards resume it, and the privilege was also to be forfeited by any that became bankrupt. It had already been enacted, too, that if a country joint-stock bank opened an office in London it should lose its right of issue.

The elaborate care taken by Parliament to protect the interest of the noteholder, and the enormous importance attached to the convertibility of the note, as distinguished from a banker's other liabilities, mark a stage in the development of banking which has been left far behind. To understand how differently the note was then regarded, it must be borne in mind that in those days a banker's circulation was his principal liability, and that deposits were in comparison but a very small item. In February, 1820, to give an instance, the circulation of the Bank of England amounted to £23,000,000, and the total deposits to £4,000,000; while in February, 1890, the figures are: Circulation, £29,000,000; deposits, £95,000,000.

During the past half-century a change has come over banking. The circulation of notes, as a whole, has declined; and, at the same time, the liability of bankers on current and deposit accounts has increased by leaps and

^a For 150 years the Bank had been at liberty to issue as many notes as it pleased against what cash it pleased, and the practical effect of the Act was to limit the *profit-earning* part of the issue.

^b The total amount so authorised was £8,631,647, divided amongst 280 banks. It was doubtless thought that these issues would have been absorbed more quickly than has been the case; and in this respect the Act may almost be said to have failed.

bounds. Thus, the balance-sheets for December, 1887, of five English Banks of Issue, selected at random, show liabilities of £200,000 on notes (compared with £360,000 in 1844), against no less than seven and a-half millions on current and deposit accounts.

Now-a-days, therefore, we have come to consider deposits as the all-important element in banking, and the liability on notes as a matter of insignificance; but, when the Bank Act was passed, people thought just the reverse, and held the opinion that, while special legislation was necessary to insure the noteholder from loss, the ordinary law of Bankruptcy was a sufficient protection for the banker's other creditors.

II.

How Sir Robert Peel arrived at the seemingly arbitrary figure of £14,000,000 as a basis of the Bank's issue against securities does not appear; but, as the average issue during the century had never fallen short of that sum, he probably fixed upon it as a safe minimum which the Bank might count upon keeping in circulation under all ordinary circumstances. The chief item in that amount was the debt owing to the Bank by the public, which, in the course of the 150 years that had elapsed since the date of the first loan, had been increased by sundry additional borrowings to a total of £11,015,100,* at which it still stands. The difference consisted of interest-bearing securities. It was further provided in the Act that, in the event of any of the other banks forfeiting its right of issue, the Bank might be allowed on application to increase its own issue against securities to the extent of two-thirds of that which had lapsed. Since that time the issues that have from various causes been suffered to fall through, amount (at the end of 1891) to upwards of £3,500,000, and the Bank has accordingly increased its authorized circulation against securities by £2,450,000 to £16,450,000.

* This does not exist as stock, but is simply a book-debt on which the Government pays the Bank interest.

As the authorized issue of the banks that still exercise their right amounts to close upon £5,000,000, the attainable limit of the Bank of England's issue against securities is nearly £20,000,000.

The gist of the Act is contained in the clause that directs the Issue Department to hold the equivalent in gold coin or in gold or silver bullion of every note created beyond the authorized issue against securities. Up to £11,015,100 the note-issue is guaranteed by Government, corresponding in every way to a State issue, and for a further sum of £5,484,900 the Issue Department itself is responsible and holds convertible securities thereagainst; but for every additional £5 note that the Issue Department puts forth beyond these £16,450,000, standard gold to the weight of 616·37 grains must be deposited in the vaults. This Department is consequently purely automatic in its functions. Like a Bank of Deposit it takes charge of gold for the public, issues a transferable deposit-receipt thereagainst, and gives it out again as soon as the receipt is returned and cancelled.

No silver bullion is held; for, though the Act gives power to hold it to the amount of one-fourth of the gold, silver cannot be legally tendered in payment of a £5 note.

On the circulation against securities there is a profit of about three per cent. (which shrinks, however, after deduction of the heavy working expenses and of a certain proportion paid to Government for the privilege of issue, to a net gain of from £50,000 to £100,000 per annum), but every note issued against gold means an actual loss. It is a great convenience to the public to take bullion to the Bank and get notes in exchange, because the latter are so much easier to handle; but the Bank has to go to the trouble and expense of printing the note and guarding the gold without any compensation.

It is usually taken for granted that the assets of the Issue Department are specially hypothecated to the service of the issue, and, to the ordinary reader, the language of the Act sounds clear on the point :

“The whole amount of Bank of England notes then”
(31st August, 1844) “in circulation. . . . shall
“be deemed to be issued on the credit of such
“securities, coin, and bullion so appropriated and set
“apart to the said issue department.”

Nevertheless, it has been held on good authority that the object of the Act is not to secure the noteholder, but to place limits to the issue,^a and that, if the Bank failed, all its creditors would fare alike, the noteholders having no advantage over the depositors. Though interesting in theory, the question is, of course, of no practical importance.

The Bank Act has been thrice suspended—namely, in the panic-years 1847, 1857, and 1866. The *Banking* Department having on these occasions, suffered its reserve of cash to sink too low, had to apply for permission to borrow notes from the Issue Department, and the Act was temporarily suspended in order that the latter might increase its issue against securities. In the statutes regulating the note-issue of the Imperial Bank of Germany, which is modelled somewhat on the lines of the Bank of England, this contingency is specially provided for. Like the Bank of England, the Reichsbank issues a fixed amount of notes against securities, but may at any time exceed the limit on payment to the Government of a fine of five per cent. per annum on the excess-issue. Under all ordinary circumstances this tax acts as an effective check; but the reserve of power is useful to fall back upon at an emergency, and a modification in that direction of the Act of 1844

^a Such is undoubtedly the effect of the measures passed in 1845, which dealt with the Irish and Scotch Banks, and this argument is based on the assumption that the three Bank Acts were one in intent and purpose.

could not fail to be beneficial in times of pressure. The mere knowledge, in fact, that the Bank possessed ability to increase the currency in case of need would remove all cause for uneasiness.

The Bank of England Note was made legal tender in England and Wales (not Scotland or Ireland) in 1833. It may be legally tendered in payment of sums above £5 everywhere except at the Bank itself—that is to say, the Bank of England cannot compel its creditors to take its own notes.

The active circulation (*i.e.*, the notes outside the walls of the establishment, and actually in the hands of the public) shows no tendency to keep pace with increasing trade or increasing population, but rather the reverse. Of recent years the average has been :

1876-8	...	...	...	£27.9 millions.
1879-81	...	.	27.5	,
1882-4	...	...	25.6	,
1885-7	...	...	24.6	,
1888-90	...	...	24.4	,

The steady decrease proves that, both in trade and in every-day life, the note is falling into disuse as a currency medium.* From trade it has been ousted by cheques, which, now that every trader keeps a banker, form the actual paper-currency of the country; and for ordinary purposes the £5 note suits neither the rich man, who finds it safer to pay by cheque, nor the poor man, for whom the unit is too large. The difficulty of obtaining change is also an obstacle to its current use. A £1 note (the re-issue of which now appears to be within measurable distance) would, on the contrary, be found most useful, and doubtless have an extensive circulation.

The employment of the Bank of England note is now

* It is also possible, however, that this falling-off has been in part occasioned by light gold, which has a tendency to accumulate in bankers' hands, and thus to displace notes.

almost restricted to two purposes. It serves, firstly, as a substitute for gold in bankers' till-money ; and, secondly, as a medium for effecting payments of £5 and upwards, either to the non-banking classes (*e.g.*, salaries), or under circumstances in which a cheque might not be taken (*e.g.*, travelling expenses, hotel bills, &c.)

In accordance with this distinction, the circulation may be broadly divided into two portions—viz., a Residual or Fixed Issue, and a Tidal or Circulating Issue, the former of which bears a preponderating proportion to the whole.

The movements are shown opposite.

It will be seen that the fluctuations are mere surface-ripples, and rarely exceed five per cent. on either side of the average. The chief features are :—

1. the large proportion—nearly ninety-five per cent.—that the fixed issue bears to the total ;
2. the increase at the end of each month and of each quarter, pointing to the use of the note in payment of salaries and dividends ;
3. the high level attained in the holiday season.

The normal ebb and flow of the note-circulation is one of the most familiar phenomena of the market, and the certainty with which its recurrence may be calculated upon deprives it of all influence over the value of money. A fall in the Reserve of a million and a quarter in a fortnight would be regarded as a serious matter if occasioned by external demands, but is looked upon with indifference if, as at the end of June, it is seen to be nothing more than the swing of the currency-pendulum. Of course, if such a movement should happen to coincide with an efflux of gold for abroad it augments the effect of the latter, and to that extent is an element of danger ; but, on the whole, the fluctuations of the Circulating Issue are too well known to affect the relations between borrower and lender.

As regards the Residual Issue the case is different. It is only rarely that this portion of the Circulation betrays any signs of life; but its movements, when they do occur, have an immediate and powerful influence over the value of money. A rise in the Residual Circulation, coupled with an increase in the Bank's "Other Securities," is a sure sign of danger ahead. It means that bankers are converting securities into cash and increasing their reserves, and is seen at times when the course of events has been such as to throw doubts upon the soundness of the banking system, and when the least hitch might precipitate a "run." It is also a sign that the anxiety may be referred to English country bankers, as a London banker under the circumstances would increase his balance at the Bank of England, while a Scotch or Irish banker would send to London for gold.

A case in point occurred in December, 1878. The stoppage of an important provincial bank was announced on the 9th, and by the 18th the Circulation, which, in the usual course, would have shown a decrease, had risen from £29,000,000 to £32,000,000, while the price of money leaped up from four and a-half to six per cent., but practically was unborrowable except on the finest securities.

III.

The remaining item in the account of the Issue Department is that of "Gold Coin and Bullion," the amount of which corresponds to and regulates the balance of the issue in excess of £16,450,000.

It has already been pointed out that the Bank's profit on the Circulation arises from the portion that is based on Securities, the remainder being in the nature of a receipt for gold deposited, which the Bank must preserve intact until the holders of its notes present them and demand it back again. The Issue Department, as such, has conse-

ISSUE DEPARTMENT.

quently no incentive to acquire gold or to increase its issue thereagainst, and, if it consulted only its own interest in the matter, might possibly be averse to so doing.^a But it is not a free agent. So far as the issue against gold is concerned, the law makes it the servant of the public, and compels it to take at a fixed price all the gold that may be offered. The Act of 1811 provides that all persons shall be entitled to demand from the Issue Department "Bank of England Notes in exchange for gold bullion, at the rate of £3 17s. 9d. per ounce of standard gold," the person tendering the same to be at the expense of melting and assaying it; so that not only is it the Bank's duty to give gold for notes, but also to give notes for gold whenever required. The holder of the gold is not bound to go to the Bank, however. The coinage of gold being quite gratuitous in this country, he may, if he so pleases, deliver it (if of sufficient amount) direct to the Master of the Mint, who will in due time return it in the shape of sovereigns, at the rate of 1869 sovereigns for every 480 ounces metal of standard fineness ($\frac{11}{12}$ pure gold, $\frac{1}{12}$ alloy), equivalent to a price of £3 17s. 10 $\frac{1}{2}$ d. per ounce. This is known as the Mint price of gold, and is 1 $\frac{1}{2}$ d. per ounce higher than the Bank price; but, notwithstanding this difference, all imports of gold are, as a matter of course, lodged in the Bank,^b the reason being that the importer in this case receives his money at once, while if he went to the Mint his gold would have to wait its turn, and the convenience of the officials, and an uncertain loss of interest would be incurred.^c

The margin of 1 $\frac{1}{2}$ d. per ounce goes into the Bank's

^a The only advantage the Issue Department derives from the notes against gold is that the gold held against them helps to secure the convertibility of the fiduciary issue.

^b Unless there should be a demand for export, in which case arrivals are more likely to be sold in the market for reshipment.

^c The time-allowance on gold taken to the Mint is said to be 20 days, and as 1 $\frac{1}{2}$ d. per ounce is just equal to 20 days interest at 3%, the result is much the same whether bullion be sent to the Mint or sold to the Bank. In practice, however, the gold coined at the Mint is received exclusively from the Bank of England, as no private trader ever sends any.

pocket, but, strictly speaking, is not profit. It is rather a compensation paid to the Bank for the trouble and expense of sending the bars to the Mint, in case it should be required to convert them into coin. Of course, no more bars are minted than is found necessary, the Bank keeping them in stock as far as possible in the shape in which they are received.

In selling gold the Bank is guided by the same consideration that would influence any other dealer. The law insists that it shall pay out sovereigns to the holders of notes when required, but beyond that leaves it at liberty to make its own bargain. If an exporter wishes to make a shipment of gold to a foreign country, it may not answer his purpose to send sovereigns, and in that case he will ask the Bank to give him bar-gold, which is more convenient for export,^a and, in fact, forms an international currency, travelling backwards and forwards as a sort of makeweight to balance the differences of international indebtedness.

The Bank is always prepared to cash its notes in bars instead of sovereigns, if desired, and usually treats them as being of equal value, charging the Mint price of 77s. 10½d. per ounce, which leaves 1½d. per ounce, or 8s. 2½d. per cent. profit; but if the demand is very pressing, she takes advantage of it just as another seller would, and puts up the price to 77s. 11d. The difference appears trivial, but as the margin on bullion transactions is calculated with extreme nicety,^b an advance of ½d. per ounce, or one-half per mille, frequently suffices to hinder an inconvenient withdrawal. Beyond 77s. 11d. it is not safe to go, because, rather than pay more, exporters might find it advantageous to send sovereigns out of the country to be melted, and the Bank would have to replace them by minting bars.

To the Issue Department the ebb and flow of gold from

^a Bar-gold is less liable to loss by friction than specie.

^b The profits made in bullion business are smaller, because more certain, than in most other trades. Being an exceptionally transferable article, gold moves as soon as the least profit is shown.

and into the country is a matter of indifference. If gold comes in, its printing-presses strike off so many more notes; if gold goes out, notes return and are cancelled. In either case its account balances as before, and its position remains the same.

So utterly improbable is the contingency of a "run" on this department as to be hardly worthy of serious consideration. It might, no doubt, occur in the event of foreign invasion, and, as a matter of fact, did once happen in the last century, when the news reached London that the Highlanders, under the Pretendor, had advanced as far as Derby. But, apart from this exceptional instance, public confidence in the note has never been shaken; and in time of panic even, when every other "promise to pay" is discredited, the circulation, instead of falling off, invariably increases.

Supposing, however, for the sake of argument, that some unforeseen circumstance should give rise to a "run," it may well be asked how the Issue Department could possibly pay the holders of all its notes in gold, seeing that sixteen millions of the money are locked up in securities.

To this it has been answered that, at an emergency, the Bank would have no difficulty in realizing its "Other Securities," and might then get the Government Debt converted into stock, and sell that, taking its own notes in payment.^a

Apparently this is the only explanation possible; but, as it is based on the assumption that buyers could be found for sixteen millions of securities at a time when the Bank of England itself was in danger, it may be taken for what it is worth.

^a By declaring the Bank of England Note to be a legal tender, the Government virtually pledges its honor to see it paid, so that it would perhaps be nearer the mark to maintain that the Issue Department, after disposing of its Other Securities, could call on the State to provide funds for the cloven millions of notes issued on the credit of the State.

CHAPTER V.
BANKING DEPARTMENT.

I.

THE Banking Department of the Bank of England is simply a bank like any other, and differs in no essential particular from its neighbours.^a Like them, it transacts ordinary banking business for the public, and, like them, it is carried on by the Directors, without Government interference, for the benefit of the shareholders.

In only one respect is its management affected by special legislation. As the Bank is the custodian of vast sums of public money, it is but just that the Government and the public should have opportunity of knowing how that money has been dealt with; and the Bank Act, therefore, requires that the Banking Department, as well as the Issue Department, shall publish a weekly statement of liabilities and assets—a condition that has been imposed on no other bank.

The first place in this Return is given to the items of PROPRIETORS' CAPITAL and REST.—The strength of the Bank, and the source of the unbounded confidence that is placed in its stability, is the enormous amount of the capital, £14,553,000, which is not only far larger than that of any other bank in the world, but even exceeds the united capital of the State Banks of France and Germany. And yet, vast as this sum appears, it is not the whole extent of the resources; for, in addition, a Rest or Reserve-fund of undivided profits has been accumulated to the extent of upwards of three millions,^b so that

^a The words “exclusive privileges of banking” appear to have been retained in the Bank Act for the sake of conformity with previous statutes, as the Bank neither possesses nor lays claim to any exclusive privileges whatsoever, other than those which appertain to and are comprised in its function of the management of the issue on behalf of the State. At the outset it possessed the prerogatives of limited liability and of immunity from competition, but its only advantage now over other banks is that of keeping the Government Account.

^b It was decided many years ago by the Court of Proprietors that the Rest should never be allowed to fall below three millions.

the actual working capital is over seventeen and a half millions.^a

The chief object of capital to a bank is to give confidence to depositors,^b and, in this respect, the security offered by the Bank of England is unparalleled. Thus, on the 2nd July, 1890, the total deposits stood at £34.3 millions, against £17.7 millions of capital and reserve, a proportion of over *fifty* per cent.; while the balance-sheet per 30th June, 1890, of the next largest English bank, the London and Westminster, shows £25 millions deposits against £4.5 millions capital and reserve, a proportion of less than 20 p. c.

In one sense, however, the very magnitude of the Bank's capital is a disadvantage, as its earnings, though amounting to nearly a million and a half per annum, dwindle, when they come to be spread over so large a sum, to the modest return of ten per cent., a result which the stock-holders jealously compare with the handsome dividends distributed by most of the Bank's younger rivals, who, not being burdened with a load that presses so heavily upon them, have, in this respect, been able to outstrip it in the race.

II.

PUBLIC DEPOSITS (see diagram).—The largest and most important account in the Bank's books, and the largest probably that any bank has ever possessed, is that of the British Government.

The public income, as it is collected day by day by the Customs and Excise Officers throughout the country, is paid in at the branches of the Bank of England; and, on the other hand, the enormous payments that the Government has to make to the Army and Navy and to the Civil Servants are all effected by means of cheques on the Bank.

^a The value of the Bank premises, which occupy nearly three acres of ground, is not included. If this be added, the capital may be put in round numbers at £20,000,000.

^b It is because the chief depositor is the nation itself that the Bank needs keep so large a capital. It must show the public not only that it is safe, but that it is safe beyond all question.

It also attends to the payment of interest on the Public Debt, and for this duty receives special remuneration.

The balance kept there by the Exchequer, free of interest, is on a par with the size of the account, and appears to average about three millions.

To a banker's eye this is an ideal account; for all its variations can be easily calculated, a handsome balance is always kept, and there is not the least fear of the Government withdrawing its money in a panic.

Beside the Exchequer account, the Public Deposits comprise the balances standing to the credit of the Secretary of State for India, of the National Debt Commissioners, and of other "official" accounts.

From the point of view of the Money Market, the most interesting feature of the fluctuations is the large increase of the balance in the March quarter. At the beginning of the year the payment of the Consols dividends, &c., causes a heavy drop, but from the middle of January to the end of March the incomings exceed the outgoings to the extent of seven millions.

The reason of this "spurt" in the receipts is that the greater part of the Assessed Taxes are paid in the March quarter, fully two-thirds of the Revenue under the heads of Income Tax, House Duty, and Land Tax being got in between New Year's Day and Lady-Day. If expenditure kept pace with the increased receipts, the balance would remain unaffected; but it is apparently the practice of the spending departments to defer very large payments until the end of March—the close of the financial year—and in the first few days of April we find a fall of four millions, which brings the balance back to about starting-point.

The results of this temporary lock-up of money are very noticeable. In the first place, the extent to which the payment of the Queen's Taxes affects the poorer classes—

those who cannot afford the luxury of a banking-account—is shown by the fact that the circulation of coin exhibits a shrinkage by quarter-day of three millions, and as this is accompanied by a decline of a million and a half in the note circulation (largely due, no doubt, to the same cause), the Bank's Reserve of Cash gains close upon £4½ millions from internal sources, and attains the highest point of the year.

The remainder of the seven millions is obtained at the expense of other banks, and helps to diminish the "Other Deposits."

The transference of so large a sum of money from the pockets of outsiders to the coffers of the Bank naturally acts upon the value of money, not only contributing to bring about the decline in the official quotation, which usually takes place at this time, but materially influencing the market-rate, by narrowing down the margin which exists between that and Bank-rate. As a rule the outside market has no difficulty in outbidding the Bank, and the success of its competition depends on its ability to do so. Thus, while the average Bank-rate for the ten years 1881 to 1890 was £3 9s. 8d. per cent., that of the market for best three months bank-bills was only £2 14s. per cent., a difference of 15s. 8d. But between January and March the impoverishment of the market, combined with the augmentation of the Bank's strength, has a striking effect on this margin. In January, owing to the large amount of dividend-payments that fall due at the beginning of the month, money is very plentiful, and the average variation large, being no less than £1 3s. per cent.; but the Revenue collection soon begins to tell on the available supply, and in February the margin is reduced to £0 14s. per cent.; while in the first three weeks of March the average difference is only 10s. 8d. per cent.

Consequent upon this tightening-up of outside rates, the Bank, at this time of the year, obtains far more than its usual share of the current discount-business.

From the end of March onward, the movements of the "Public Deposits" are quite normal, and of slight importance. The payment of salaries, dividends, &c., causes a fall at the end of each quarter, and from its maximum at the end of March the balance gradually descends till it reaches its lowest point in November. Preparation then begins to be made for the heavy New Year's payments, and if, as is usually the case, the Exchequer balance at the end of the year should be insufficient to meet these, the Bank advances the deficiency on the security of "Deficiency Bills," the Government repaying the loan out of the January revenue. An increase in the item of Government Securities is consequently an almost invariable feature of the first Return of the year.

III.

OTHER DEPOSITS. The whole of the Bank's liabilities to the general public (with the exception of a small amount of Bank Post Bills, which are stated separately) are grouped together under the head of "Other Deposits." These consist of balances standing to the credit of its customers in London, Manchester, Liverpool, Birmingham, &c., and correspond to the "Current Accounts" (rather than to the "Deposit Accounts") of other banks.

In a rough sort of way, the "Other Deposits" may be said to be a measure of the supply of loanable capital, and to all who are conversant with the constitution of the Money Market every change in this item conveys a significant meaning. If they rise beyond the usual average, the augmentation is regarded, in the absence of other known

causes, as an indication that the supply of money in the open market exceeds for the time being the effective demand. On the other hand, a fall below the average points to scarcity, and is the usual forerunner of an advance in outside quotations.

This connection between "Other Deposits" and the market rate is due to the fact that the Bank of England is the Bankers' Bank, and that the Other Deposits include, in addition to the balances of many great corporations and wealthy merchants, the cash balances of numerous Country Banks, and of the whole of the London clearing-bankers. Each of the clearing-banks, of which there are twenty-six, keeps an account at the Bank, and the differences arising out of the daily clearings are settled by transfers from one to another in the Bank's books. Bearing in mind the magnitude of the daily clearings (a total turnover of fifty millions or more is nothing unusual on a fortnightly Settling-Day), it is evident that for this purpose alone substantial balances need be kept.

But in addition to those balances the London bankers also entrust to the Bank's keeping the amount of cash that experience has taught them the necessity of holding in reserve to meet any sudden demand that may be sprung upon them. A more natural system, one would imagine, would be to look after their money themselves; but it is one of the peculiarities of English banking that no establishment in the country, except the Bank of England, takes charge of its own reserve. Wherever possible the responsibility is shifted on to someone else. Such cash as is necessary for daily requirements is kept on hand, but the uninvested surplus that must be set aside to provide for unexpected withdrawals is consigned to the care of some other bank. The country branch-banks look to the head-office, the head-office relies on the balance at its

London Agent's, and the London Agent keeps his reserve at the Bank of England.

The Bank has therefore the responsibility of looking after what is really the ultimate banking-reserve of the whole country, and the "Other Deposits," or, at any rate, that part of them belonging to bankers, are as far as actual cash goes the only source from which an immediate supply can be obtained to satisfy any immediate need. In whatever part of the country an urgent demand for cash should spring up (as in case of a "run" on a bank), it can only be met by trenching on the one central fund.

If the banker's balances were reducible into nothing more than the provision for clearing-differences and a reserve, they would, from their very nature, be all but free from fluctuation. The total under the former head would not vary, as the whole of the debits on any given day's transactions equal the whole of the credits, leaving the difference the same; and the reserve also would, when business and credit were in normal condition, be liable to little change.

As a matter of fact, however, the banker's balances do vary very considerably, and the disturbing cause is to be found in a third element, that of floating money. There are times when a banker literally has more money to dispose of than he knows what to do with. When the dividends are paid, for instance, the market often becomes full to overflowing, and the ordinary outlets are insufficient to carry off the supply. All the bills that can be found are eagerly bought up, and all applications for loans attentively listened to, but there still remains a margin awaiting investment, and it is this margin of idle money that is sent to the Bank to swell the Other Deposits until suitable employment can be found for it. The same thing occurs in periods of business stagnation, and in

fact whenever the demand is slack, or the supply excessive. At all such times the Other Deposits are sure to increase, and the increase is equally sure to be attended by lower rates.

IV.

The lowest point that the Other Deposits have touched in the ten years, 1881 to 1890, is £21½ millions, and £24 to £25 millions is a fair normal average.*

How much of this belongs to bankers, and how much to the other customers of the Bank is not known. A return was formerly made to Government in which the Bankers' Balances were shown apart, but its publication has been discontinued since 1877. At that time, however, the balances of other customers amounted approximately to £11 millions, the difference being bankers' balances.

The most marked feature in the regular movements of this item (see Diagram) is a large and sudden increase at the turn of the half-year. On the 30th June, and 31st December, many joint-stock companies are in the habit of paying in large sums to the credit of their banking accounts, in order that the item of "Cash" may make a good show in the published balance-sheet, and as the Banks themselves are also influenced by the same consideration, much of this money is sent into the Bank to swell the Other Deposits, thus causing an abnormal increase. After the accumulation has served its purpose it is rapidly dispersed again.

Another rise is caused by the dividend payments at the beginning of October; but the corresponding movement in April is only weak, because the market, owing to the collection of the revenue, is usually bare just then, and the money is easily absorbed.

* In 1891 the average rose to £31½ millions. The bulk of this excess is doubtless due to a sustained increase in the bankers' balances, consequent on Mr. Go-chern's admonitory speech at Leeds in January, but part may also be assigned to a transfer of some of the funds formerly deposited with the Barings.

These fluctuations are all such as recur with regularity year after year, but there are also others of less frequent occurrence which call for notice. Times of difficulty and crisis have in recent years always been accompanied by a great and rapid advance under this head. At such conjunctures bankers are the first to take alarm, and immediately set about strengthening their reserves.

The year 1875, which was made memorable by the failure of the Manchester firm of Collic, and by other mercantile disasters, will serve as an example, and the more so as the changes that then took place in the bankers' balances are known with certainty:—

On the		Millions	Millions
19th May ..	The Other Deposits stood at and the Bankers' Balances at	£17	£7 3
22nd May ..	22nd May. Crisis at Rio. Suspension of large bank. Reported embarrassment in London		
26th May ..	.....	19 1	10
2nd June ..	31st May Large failures	21.6	11 9
9th June ..	3rd to 8th June. No further failures. Confidence partially restored		
15th to 19th June ..	15th to 19th June. Failure of A. Collic and Co, followed by others	20 1	10 5
23rd June ..	24th to 29th June. More failures	22 8	12 4
30th June ..	.....	25 3	14.2

In this instance we see that in six weeks the Other Deposits registered an increase of £8½ millions, and that of this sum no less than £7 millions were paid in by bankers, who nearly doubled their balances. The remaining £1½ millions may possibly have been money that was transferred by its owners from the custody of other banks to that of the Bank of England, as it is probable that the panic feeling which drives depositors away from other banks, drives them to the Bank of England as the last refuge.

Another example is found in 1878, the year of the City

of Glasgow Bank collapse, but here the action of the banks can only be a matter of surmise :—

On the		Millions.
25th Sept. . .	The Other Deposits stood at	£20.1
	26th to 30th September. Rumours of difficulties in Scotland	
2nd Oct. ....	.....	21.9
9th Oct.	2nd October. Stoppage of City of Glasgow Bank	26
16th Oct. . . .	10th to 15th October. Other failures	27.3

This is an increase of £7½ millions in three weeks.

Finally, in November, 1890, when it became known that the Barings were in difficulties, the Other Deposits ran up in seven days from the already high figure of £30.3 millions to £36.4 millions, which up to that time was the highest point recorded.

War rumours produce much the same effect. In the early part of 1885 a dispute with Russia, in connection with the delimitation of the Afghan frontier, gave rise to considerable uneasiness, and the Other Deposits, which in February stood at less than £24 millions, had risen by July to as much as £34½ millions. Business had meanwhile come almost to a standstill, and the large cash-reserves that bankers had gathered together hung on their hands for want of employment long after all danger of war had passed away. Money was in consequence "a drug in the market," and for six months, from the middle of May, could be borrowed from day to day at an average price of less than 10s. per cent. per annum.

V.

One other point in connection with the bankers' balances remains to be mentioned.

When the set of the gold-current is against us, as is usually the case towards the end of the year, the only practical way in which the Bank can counteract the outflow is to raise the value of money above the general Continental level. This not only tends to make the export unprofitable, but at the same time induces bankers in other countries to buy up London paper for temporary investment, thus turning the exchanges in our favor, and, eventually, bringing gold from other quarters to replace that which has been lost.

The success of this measure always depends, however, on the extent to which it is seconded by the open market. Continental bankers who have floating funds to invest care nothing for the rate that the Bank of England is supposed to charge. In bidding for bills their competitors are not the Bank of England, but the dealers in the open market, and it is the market-rate alone that affects their calculations. If the London market is above their home market, they will buy freely, but a high Bank-rate alone will produce no effect.

For the Bank, then, to declare that money, for which yesterday 4 per cent. was asked, shall to-day be worth 5 per cent., is of no avail unless other big dealers concur, and fix their charge accordingly. It is of course to the advantage of other lenders to raise their price, if feasible, and, to a certain extent, they are almost forced to follow the Bank, because, as we have already seen, the interest they pay to their depositors is regulated by the official rate, and, as they have to give more when the rate advances, they must also charge more, or be out of pocket. But the price of money in the open market does not depend on this or similar considerations, but, like that of other commodities, is adjusted by the equation between supply and demand.

With demand we have here nothing to do; but, so far as supply goes, a ready test of strength is afforded by the amount of the "Other Deposits." If the Other Deposits stand at a low figure, the supply is short, and the market will as a general rule keep well up to the Bank, responding readily to the latter's initiative. If, on the other hand, the Other Deposits are high, indicating a supply in excess of requirements, then the pressure of this margin of unspent money will cause lenders to beat down rates in their anxiety to use up the funds under their control, and the Bank will be quite powerless to influence outside quotations. The larger the margin of idle money in such cases, the larger will be the disparity between official and unofficial quotations. In 1887, for example, we find the following figures:—

	Other Deposits,	Bank Rate.	Market Rate for 3 months Bank Bills	Difference
21st Sept	421.6 millions <i>(least of year)</i> ...	4%	3½%	3s. 9d. (=43%)
17th Aug. ..	23.7 , " <i>(average</i> , ")...	3½	2½%	8s. 9d. (=14½%)
20th July	27.4 , " <i>(highest</i> , ")...	2%	1½%	12s. 6d. (=31⅓%)

The efficiency, therefore, of a high Bank-rate in putting a stop to an efflux of gold varies inversely with the amount of surplus funds at the disposal of the market, being greatest when the Other Deposits are at their lowest, and *vise-versa*; and although, generally speaking, an export tends naturally to bring about an advance in rates, because every million sent out of the country, besides reducing the gold reserve, also causes a contraction of the available stock of market-money, yet it may, and sometimes does, happen, when supply is excessive, that the market could afford to let two or three millions go without feeling the loss. In such circumstances a high Bank-rate is comparatively useless, and the reserve would

* Compare on this point the Other Deposits (Diagram No. 4) with the comparison between market-rate and bank rate (Diagram No. 18). When the Other Deposits attain their maximum in July, the percentage of the former to the latter is at its lowest, while at the end of February the position is just the reverse.

soon fall to a dangerously low point unless other means could be found to protect it.

Repeated advances of the rate would no doubt have the effect in the end of screwing the market up to the desired level, but there is a limit to the Bank's powers in this direction. For many purposes Bank-rate is still regarded as a standard of the value of money; the charge made for interest in current-accounts is everywhere based upon it, and outside London it is the minimum discount-rate. The consequence is that an unusually high rate would, unless justified by a crisis, cause an outcry throughout the country, and as this would be distasteful to the Bank, the movements are now confined within narrow limits, 5 per cent. being, as a general rule, the official ultimatum. If 5 per cent. fails to arrest the export, other measures have to be resorted to. The Reichsbank, in such a case, would possibly give exporters to understand that they must be prepared to incur the consequences of its displeasure if the withdrawals were persisted in. This the Bank cannot do; nor can it put a premium on its gold, like the Bank of France. And yet the outflow must be stopped somehow.

Whenever then it becomes evident that the market is hindered from following the Bank by the pressure of a margin of money for which no suitable employment can be found, the Bank goes straight to the root of the difficulty, and gets rid of the incubus by the simple but peculiar expedient of borrowing the surplus herself. This is effected by selling Consols for "money," and buying them back for the "account." The "account" price, at which they are bought back, is of course higher than the "money" price, at which they are sold (because it includes a larger proportion of the accruing dividend), and the difference between the two prices represents the interest paid for the loan.

As the buyers "for money" give cheques on their bankers in payment, the bankers' balances at the Bank are to that extent reduced in the next clearing; consequently the Other Deposits fall, and, as the owners of those deposits have less to lend than they had before, the market at once hardens, and the Bank succeeds in its object of raising the price of money above the Continental level, and of tempting foreign capital over.

An example will make the principle clearer. On an average, the movements of gold to and from foreign countries leave the Bank at the end of September with over a million in pocket, but in 1888 there was a small loss on that date, and in order to attract imports the rate was put up to 5 per cent., the effect being that by the end of October the Bank had gained largely on balance. The movements of the next few weeks were as follows:—

Date	Securities in Banking Department		Imports and Exports of Gold.	Bank Rate.	Market Rate		
	Other Deposits, —	— Millions			London	Paris	Berlin
	—	Millions.					
31st Oct.	£25.6	£37.1	Gain on balance £1,181,000	5	3½	4½	2½
7th Nov.	25.5	36.8	Out 877,000	„	3½	3½	3
14th „	25.9	36.5	„ nil	„	3½	3½	3
21st „	22.3	34.3	„ 1,179,000	„	4½	3½	3½
28th „	22.1	33.4	„ 199,000	„	4½	3½	3½

As the market was over-supplied with money—Other Deposits standing at $25\frac{1}{2}$ millions—outside rates had fallen away to $3\frac{1}{2}$ per cent., and it was no longer so profitable to send money to London. Accordingly the export movement got the upper hand again, the 5 per cent. Bank rate being quite ineffectual to check it, and in the first three weeks of November two millions were taken out. Then the Bank took decisive action. Consols were sold, and money borrowed, to a sufficient extent to

reduce the Other Deposits by £3½ millions, with the immediate result of raising the outside rate from 3½ per cent. to 4½ per cent. The quotation being now higher than in other capitals the tide began to turn, and by the end of December the Bank had regained all its previous loss.

Another way of controlling the market has been often suggested. The Bank, it is said, could easily make herself mistress of the situation by offering to pay interest on deposits. As a great part of the money lying with other banks is deposited as much for the sake of security as of profit, there is no doubt that a very low rate of interest would suffice, when backed by the name and prestige of the Bank of England, to tempt much of it over. There would then be no difficulty in making the Bank-rate effective, for whenever the market fell away, the Bank could always pull it up again by advancing the deposit-rate, and thus exhausting outer supplies.

To this course there are, however, some obvious objections. In the first place it would be a reversal of the Bank's traditional policy, which subordinates profit to perfect safety. But perfect safety, it is clear, is not compatible with the possession of a vast sum of money, repayable at a day or two's notice, and if the Bank is already able to obtain the loan of 24 millions of money without paying a shilling for it, what would the Deposits amount to if interest were offered? The Bank, it must be remembered, is the repository of the nation's balance, and cannot afford to expose itself to the risk of a "run" in the event of a crisis. As matters stand at present, there is no such risk if ordinary precautions are taken, for, as we have already seen, the Deposits *increase* in time of panic; but whether such would still be the case when the depositors were a large and mixed body is another question.

Then again, the Bank, by competing with its neighbours for deposits, and thus robbing them of a lucrative part of their business, would not only give dire offence to its best customers, but would probably add little to its own earnings. Other banks make deposits pay because they invest the greater part of the money in interest-bearing securities, and retain only a small proportion to meet withdrawals, but the Bank makes a practice of keeping 43 per cent. in reserve, and would thus, while giving interest on all it received, be earning it on only about half: besides which, a large portion of the 24 millions, of which the Bank now enjoys the use free of interest, would no doubt be at once transferred from Current Account to Deposit Account, swelling the total on which interest would have to be paid.

Apart, however, from all considerations of safety or profit, the great difficulty would be to obtain and, above all, to keep up a sufficient Reserve. If, for instance, the Deposits increased to only double their present amount, the Bank would have to add £11 millions to the Reserve in order to keep it up to the usual proportion (and under the circumstances the proportion would have to be increased rather than diminished); but where is the gold to be had, or, if obtained, how is it to be defended? In the nine years, 1881 to 1889, notwithstanding the attractive power of high rates, there was but a small gain on balance, the figure's being:—

	Excess of Imports over Exports.	Excess of Exports over Imports.
1881-3	£1,133,000	.....
1884-6 . . . . .	.....	£2,392,000
1887-9	£2,895,000	.....
Gain on balance. . . . .	.....	1,636,000
	<u>£4,028,000</u>	<u>.....</u>
	<u>.....</u>	<u>£4,028,000</u>

Practically, therefore, the Bank is just able, by the

exercise of constant care, to preserve the balance between imports and exports, and it is clear that the price it would have to pay for a large and permanent addition to its stock would be all but prohibitive; so that, however peculiar the system may appear of forcing up outside rates by borrowing and paying interest for money which it does not want, it nevertheless seems to compare favorably with the alternative proposal of allowing interest on deposits, and, until a better mechanism can be devised, we are likely to see the Bank continue using the bankers' balances as a lever by which to lift the market.

CHAPTER VI.

BANKING DEPARTMENT (*Cont.*)

GOVERNMENT SECURITIES. OTHER SECURITIES.—Under these headings the Bank states the total values of its investments.

“Government Securities” comprise, as their name sufficiently indicates, all those (such as Consols, Exchequer Bonds, Treasury Bills, &c.), which yield an income guaranteed by the British Government.

Little importance attaches to changes in this item, but as they sometimes throw a side-light on the state of the market it is well to know their meaning.

At the end of the quarter, for instance, there is often a sudden increase, which represents the security given by the Treasury to cover temporary advances obtained from the Bank. As the balance standing to the credit of the Government is usually insufficient to meet the dividend and other payments then falling due, the deficiency is borrowed from the Bank on the security of “Deficiency Bills,” and is afterwards paid off out of the revenue collected in the course of the few following weeks. No borrowing is necessary at the end of March, because the Government balance then stands at a high point, owing to the influx of the Income Tax.

A movement in the Government Securities at the time of the monthly settlement in Consols, or on the occasion of a fresh issue of Treasury Bills, points to changes in the Bank’s investments, and sometimes produces a passing effect on outside rates. If the Bank, for example, allows a parcel of its Treasury Bills to run off without renewing them, the new allotment will fall to be paid for by the market and, so far as it goes, will tend to make money dearer.

The sale and re-purchase of Government Securities ("borrowing on Consols.") has been already referred to as a chief means of exhausting outer supplies.

"Other Securities" (see diagram). The general investments of the Bank in Indian, Colonial, and Corporation Stocks, and in Railway Debenture Stocks, &c., its stock of bills of exchange held under discount, and the sums due by bill-brokers and others for advances made to them against security, together make up, with other miscellaneous assets,^a the large total that figures on the credit-side of the Return as Other Securities. Since 1880 the item has not fallen below £17.9 millions, and the average (1881-90) has been £21½ millions.^b

The particulars in detail are not known. Formerly a return was made to Parliament in which the loans and discounts were distinguished from other assets, but this information has not been supplied since 1875. So far as discounts go, the Bank's business appeared at that time to be falling off, and conjecture estimates the present average contents of its bill-case at a comparatively low figure. The market is almost invariably able to underbid the Bank, and in the competition for bills the lowest bidder is usually successful. It may be laid down as a general rule that the ordinary run of discounters only apply at Threadneedle Street under exceptional circumstances—such, for instance, as when the market is bare, and an advance of the official rate anticipated. Dealers may then be unwilling to increase their commitments except with the proviso "subject to Thursday's rate," and those in search of accommodation may prefer to take their chance at the Bank.

The bulk of the Bank's ordinary business with borrowers

^a The value of the branch premises is included in this item.

^b For 1891 the average comes out £29.7 millions, the increase being sufficiently explained by the advance of £7½ millions made by the Bank in the matter of the Baring liquidation.

takes the shape—not of discounts, but—of short loans against the deposit of the best class of Stock Exchange securities or of bills of exchange. Money is not lent from day to day, nor on the security of documents representing produce. Whenever there is a pressure for money in the open market, whenever demand exceeds supply, the Other Securities are increased by transactions of this class, showing that the Bank has been called upon to fill up the void.

The most regular of these changes is an expansion at the turn of the quarter, when in order to meet the demand occasioned by the falling-due at this period of dividends, salaries, rent, &c., bankers call in a portion of their deposits with the brokers, and, as the reserve which the latter are in the habit of keeping is not enough to meet heavy claims, they have to borrow from the Bank in order to repay.

The lock-up of money caused by the collection of the Income and Property Tax also makes its mark on the Other Securities, and produces a steady rise from the middle of February to the end of March, followed by a rapid fall as soon as the Treasury lets the money out again in April.

These movements call for remark not on account of the mere fact that dealers are at intervals compelled to resort to the Bank for aid, but because they show how ill adapted the market is to bear a slight extra strain. Though its liabilities and resources are of vast proportions, yet so delicate is the adjustment, and so small the unused margin kept as provision against contingencies, that the removal of two or three millions suffices to destroy the equipoise, and to leave it dependent on the support of the Bank for the means to pay as it goes.

A simultaneous increase of both Other Securities and Other Deposits is frequently seen, and is taken to indicate

(unless preparation is being made for dividend payments, &c.), that bankers are calling in funds, and strengthening their balances as a precautionary measure. This is a feature of the Return whenever any uneasiness is felt in the market, and the gravity of the impending danger may always be gauged by the extent of the movement.

In 1866, on the failure of Overend Gurney & Co.—the last occasion of an actual crisis—the Other Securities rose from

£20.8 millions on 9th May,

to £30.9 , , 16th ,

being an increase of £10 millions in seven days; in 1875, when A. Collie & Co. failed, from

£18.3 millions on 16th June,

to £25.5 , , 30th ,

in 1878, on the suspension of the City of Glasgow Bank, from

£17.3 millions on 25th Sept.,

to £23 , , 16th Oct.

and in November, 1890, (the Baring difficulties), from

£25.1 millions on the 12th,

to £32.1 , , 19th.

The Bank, it will be seen, lends with the greatest freedom on such occasions, this being the best way of allaying the feeling of panic; but as the borrowers are only actuated by a desire to be "on the safe side," the money is not really wanted, and the greater part of it is usually left in the hands of the Bank, explaining the advance of the Other Deposits.

CHAPTER VII

THE RESERVE.

I.

THE total amount of Notes and Coin, or cash in hand, held by the Banking Department, constitutes what is known as the "Reserve."

These are the vital figures of the Return. On the maintenance of a sufficient store of actual cash to satisfy the claims of depositors depends the very existence of the Bank, for the whole of the Deposits are practically debts payable in gold on demand, and the Bank must either fulfil its obligation to repay when called upon, or close its doors. Between the proportionate strength of the Reserve and the price that the Bank charges for loans there exists, too, an intimate connection, and the Reserve is in fact both the basis of the Bank's credit and the key to the Bank-rate.

As an idea sometimes crops up that the Reserve secures the note-holder as well as the depositor, and that an export of gold is bad for the country, because it must impair the ability of the Bank to cash its notes on presentation, it may be well to point out before going further that the convertibility of the note has nothing whatever to do with the Banking Department, and that the "Reserve" is a *Banking Reserve*, maintained solely for the purpose of cashing depositors' cheques. The misconception arises from confounding the functions of two distinct funds—namely, the Banking Department's cash-reserve against deposits, which the note-holder cannot touch; and the Issue Department's stock of gold appropriated to the service of

the note, which the depositor cannot touch. Perhaps the fact that the "Reserve" is habitually spoken of as Gold, while the Bank's entire stock of metal (with the exception of a small proportion of coin required for till-money) is held by the Issue Department against notes issued, may partially account for the confusion. It is obvious, too, on examining the Return, that a withdrawal of bullion must diminish the stock in the Issue Department, but why at the same time it should also affect the cash in the Banking Department does not at first sight appear at all clear.

The difficulty disappears, however, on considering the means employed to take gold from the Bank. In order to do so, the usual course is to obtain credit with a London banker by discounting bills, or selling securities, &c., to make use of that credit by asking for Bank of England Notes, and to convert the notes into gold at the Issue Department. The gold, it is true, is actually paid out by the Issue Department, but the notes which give power to demand that gold are bound to come out of the Reserve of the Banking Department. The reason is that London bankers keep comparatively little cash on hand, but rely on their balance at the Bank to meet any exceptional demand. Consequently, the banker who is called upon to furnish the notes required for a large gold-withdrawal will be obliged to replenish his till by sending across to the Bank for more notes, so that the loss of legal-tender is thus ultimately borne by the Reserve.

For the sake of illustration we will take a Return, that of September 7th, 1887, in which the proportion of Reserve to Deposits stands at about the normal figure, and assuming a gold-export of say two millions to take place, and the bankers to have made up their balances at the Bank by calling in money from the brokers (who have provided it by borrowing at the Bank, causing a corresponding

increase in the Other Securities), will see what change is thereby produced.

The Return was as follows:

ISSUE DEPARTMENT

Notes issued.....	£34,787,015	Government Debt	£11,015,100
		Other Securities	4,734,900
		Gold Coin and Bullion	19,037,015
		Silver Bullion .....	..

BANKING DEPARTMENT.

Proprietors' Capital ..	£11,553,000	Government Securities ..	£14,042,742
Rest	3,712,328	Other Securities	19,171,812
Public Deposits	4,231,743	Notes	10,074,675
Other Deposits	21,915,670	Gold and Silver Coin ..	1,302,873
7-day and other bills ..	179,361		
	<hr/>		<hr/>
	£14,592,102		£14,592,102

and after the imaginary withdrawal would appear thus:—

JOURNAL DEPARTMENT

Notes issued	£32.8 millions.	Securities	£15.8 millions.
		Gold	17 "
£32.8	"	£32.8	"

RANKING DEPARTMENT

Capital and Reserves ..	£18.3 million.	Securities	£35.2 millions.
Deposits	26.3 ..	Notes	8.1 ..
		Coin	1.3 ..
<u>£44.6</u>	<u>..</u>	<u>£44.6</u>	<u>..</u>

It is evident that the means possessed by the Banking Department to pay its creditors in *cash* on demand have been reduced from $\frac{114}{263}$ or 43½ per cent. to $\frac{94}{263}$ or 35¾ per cent.; but the Issue Department is no worse off for the withdrawal, having simply performed the mechanical function of giving up against return of its receipts a portion of the gold which it was taking charge of on behalf of the public.

The result of an export of gold is thus shown to be a reduction of the Reserve, and a consequent falling-off in the

power of the Bank to pay its debts; and to this fact is due the great importance that is attributed to the movements of the legal-tender metal.

II.

While it will be readily admitted, seeing that the solvency of the Bank depends on the maintenance of an adequate cash-balance, that the strength of the till is a matter that intimately concerns its creditors and stockholders, it may seem that, to the business community generally, the question of a greater or less Reserve, except in so far as it affects the value of money, can present little direct interest.

As a matter of fact, however, the stability of the Bank of England concerns every banker and merchant in the Kingdom; and it is no exaggeration to say that, if the Reserve were lost, this "nation of shopkeepers" would have to put its shutters up.

The explanation turns on the law of legal-tender. According to law a tender of payment (of any sum above forty shillings) is not valid unless made in the current gold coin of the realm, or—what is the same thing—in Bank of England Notes. Every creditor, therefore, has the right to insist on payment in gold.

In all ordinary circumstances trade-payments are effected by cheque, and this dormant right is all but lost sight of; nevertheless, all our buying and selling, all our borrowing and lending, is based on the principle that debts are payable in gold.

Now, the class of debts that exercises the greatest influence over the state of credit is that owing by bankers to their customers, and these alone (to say nothing of the indebtedness of merchants one to another) exceed by hundreds of millions sterling the whole stock of gold that the country possesses. The sum due on the 31st December, 1890, by

the Banks of the United Kingdom, under the head of Deposit and Current Accounts, was estimated by the *Economist*, on the basis of the balance-sheets published by the joint-stock establishments, at, in round numbers, £650 millions; while our whole stock of legal-tender does not probably exceed £126 millions—viz.:

Gold Currency, estimated (at the outside) "at £110 millions.	
Bank of England Notes issued against securities 16	"

£126	
"	"

and of these £126 millions it is quite likely that half to two-thirds are in actual circulation among the public, leaving a balance of say £50 or £60 millions available for banking purposes.

Of this fund the lion's share is held by the Bank of England, which keeps an average of £18 millions in its coffers; and the remainder is scattered about among the tills of the hundreds of banks throughout the United Kingdom. For every pound deposited with the Bank of England, 9s. are kept in cash and 11s. are invested in securities; but if the above figures are approximately correct, it follows that, for every pound deposited with other banks, less than 2s. is on the average set aside to meet withdrawals.

This cannot be called a Reserve. The meaning of “reserve” is a fund set apart for use at an emergency—an extraordinary fund for extraordinary occasions—but the cash held by bankers is their till-money, the stock-in-trade necessary for their every-day transactions. What they regard as a reserve is something very different. The reserve, properly so called, of a Provincial Banker consists of readily convertible securities, such as Consols, &c., of money “at call” with the London brokers, of a credit-

* The estimates vary widely—from £70,000,000 upwards.

balance in the books of his London Agent, and in some cases of a balance at the Bank of England as well. The same is true of the London banker. His actual reserve consists, not of a store of cash locked up in his strong-room, but of money at call, a balance at the Bank, and a bundle of securities.

So long as the central fund holds out, these reserves are of course just as good as cash, and are more easily managed than an accumulation of notes and coin; but the point is that they are not actually cash, and that though the banks have borrowed unheard-of sums, which they promise to repay in gold or notes on demand, they hold no gold or notes wherewith to pay, but depend on obtaining their supply, when wanted, from someone else.

All of them without exception rely, directly or indirectly, on the Bank, and not one is able to meet an unusual demand for cash out of its own resources. Whenever or wherever such a demand may spring up it must fall on the Reserve. If trade revives in the North, and more gold is wanted to pay wages, the London Agent must supply it; if a banker in the South has reason to fear a "run," and wants more notes to strengthen his till, the London Agent must supply them. But the stock of cash kept by the London Agent is adapted only to his known requirements, and is not meant to meet unforeseen demands; consequently he draws a cheque, and sends across to the Bank for the money.

In America, if a banker accepts deposits, the national banking law insists that for every \$1 lodged in his hands he shall set aside \$1 in coin, or its equivalent; but in this country the law takes no cognizance of a banker's duty in that respect, and leaves him at liberty to keep as much, or as little, legal-tender as he pleases. It forbids him to put forth a single note beyond the amount assigned to him

in 1844, but is silent on the subject of deposits; and while the State-controlled liability to the public of all the banks in the United Kingdom (excluding the Bank of England) amounts on their authorised issue to £14 millions, their uncontrolled liability on Current and Deposit Accounts amounts to £650 millions.

Practically, the whole of this vast sum is payable in gold on demand, but on the assumption that only a very small proportion will be asked for at any one time, bankers have locked up over 90 per cent. of it in bills of exchange, securities, loans, etc., and only the Bank of England pretends to keep up a large store of legal-tender money.

The thirteen or fourteen millions of notes and gold lying in its vaults are therefore the ultimate and sole cash reserve of the whole country, and, if the Bank lost that reserve, neither the banks which depend upon it, nor the customers which depend on the banks, would be able to keep their engagements.

On it, in short, reposes the entire fabric of English credit.

III.

One of the most remarkable features of our banking-system is the fact that the Bank of England—the guardian of our only store of gold—while allowing that its business differs from that of other banks, and that it would be injudicious to let the Reserve sink below what the directors consider a safe point, holds nevertheless that the danger-limit depends solely on the character and extent of its own liabilities (quite apart from those of the bankers who have claims upon it), and has on no occasion either expressed the intention of keeping up a reserve of specie for the whole country, or acknowledged a sense of duty on that score. But, though unwilling to actually avow

responsibility, the Bank, at the same time, is unable to disavow it, and the promptitude with which, for many years past, it has always defended the Reserve from foreign assault, even at times when by so doing it was putting itself out of the market, proves that it tacitly accepts the situation.

The task that the Bank has to perform is no grateful one, however. The interests involved are in direct conflict. On the one hand are its stockholders, always ready to point out that if less money were kept lying idle a larger dividend might be earned, and on the other hand the public, equally ready to maintain that, as the Bank pays no interest on deposits, it could very well afford to lay aside a larger proportion even than at present.

On paper, this arrangement—or want of arrangement, rather—looks anything but satisfactory, but in practice it works smoothly and well, and the business-world has learnt to place complete confidence in the Bank's management of the National Specie Reserve.

It has often been suggested that the clearing-bankers, instead of lending their spare money to the Bank of England, might form a mutual association, appoint a committee of management, keep their own joint cash-reserve, and share among themselves the profit now accruing to the Bank. But bankers appear to view such schemes with indifference, and are quite satisfied to leave matters as they are. They have a motive for their disapproval. In addition to knowing that their money is absolutely safe in the Bank's hands, and that the feeling of responsibility (which though unconfessed is none the less felt), and a dislike of adverse criticism, will always restrain it from unduly economising the Reserve, they feel convinced—and this is the real inducement—that if events should ever again occur of a nature to imperil the

Bank's safety the Government would intervene to save it. They believe that, if another crisis ever happens, the Government, if need be, will help the Bank, and, what is more to the point, that the Bank, if need be, will help them ; while, if they kept their own reserves, there would be no reason why either the one or the other should come to their assistance.

The Government they consider would have no choice but to help the Bank. As its balance is kept in Threadneedle Street, and a large part of its business transacted there, the stoppage of the Bank would throw the machinery of the State into utter confusion : besides which, the Bank is the sheet-anchor of our national credit, and no ministry dare face the consequences of its failure, which would be almost as calamitous to the country as those of a civil war. Past experience, too, sides with their view. Thrice since 1844 has the Bank been on the point of closing its doors, and thrice has the Government stepped in to avert the catastrophe.

Bankers conclude, therefore, that whatever else may happen at a future crisis, the Bank of England will weather the storm, and, by presenting it with their surplus in time of ease, they expect to establish a claim to its good offices in time of stress.

IV.

During the ten years 1881—90 the Reserve kept by the Bank averaged £18.1 millions, but the fluctuations were wide, ranging from £9.2 millions to £19 millions.

The figures (see Diagram) show a sharp rise in the March quarter, which is succeeded by an intermittent fall that lasts till the end of the year. Because the Reserve declines from March onward, it does not follow, however, that it actually

becomes weaker, and to judge fairly of its strength it must always be placed side by side with the varying liabilities against which it is held, the abstract figures alone being no criterion.*

On comparison of the Reserve with the Deposits we find that the proportion rarely falls so low as 30 per cent., which is considered the minimum, or exceeds 50 per cent., and that the average is about 43 per cent.

The influences that act on the Reserve divide naturally into home and foreign:—into demands connected with the internal circulation of currency, and demands connected with the working of the foreign exchanges.

Home requirements affect it because, as we have seen, it is the only lump-sum in the country of unemployed legal-tender money, so that if more sovereigns, or more notes, are at any time required by the country to carry on its business they must of necessity come out of the Bank's coffers.

Gold is employed chiefly in the payment of wages, and is also necessary for ordinary household expenditure, for railway-fares, &c.

Notes take the place of gold :—

- (a) in cases where large sums must be held in cash : bankers' till-money, for instance ;
- (b) for payments of five pounds and upwards to the non-banking classes ; and
- (c) under circumstances in which, generally speaking, a cheque would not be taken.

In two of these cases the demand for currency is liable to large expansion. More gold will be wanted if trade improves, because then wages rise, and more people find employment; and more notes will be wanted if, at any time, credit is disturbed, because then bankers naturally increase

* It must be remembered too that, as many of the deposits must be of a permanent character, the Reserve is always far stronger than it looks.

their till-money. The result in both cases is the same : the Reserve falls, and the Bank raises its rate to attract fresh supplies of gold from abroad. It will accordingly be found that the Bank-rate, in those years in which business has been good, exceeds the usual average, while the high rates of panic-years are notorious.

The movements of the note circulation have already been shown, and the opposite diagram displays those of the internal gold circulation.

Again the chief feature is the movement in the March quarter, caused by the collection of the Queen's Taxes, which sweeps three million sovereigns into the Bank.

On referring to the diagram of the Reserve, it will be noticed that May and November each exhibit a falling-off of about a million, which is regained a few weeks later, and as the same temporary loss now re-appears in a more pronounced form, it is evidently due to some internal demand of a regularly recurring nature.

To interpret the meaning it is necessary to go back to the Bank Acts. The legislation of 1844 applied only to the banks of England and Wales, but in the following year other measures were made law, which dealt with those in the remaining portions of the Kingdom. These latter Acts provide that, when the circulation of a bank in Scotland or Ireland exceeds a certain fixed sum, such bank shall hold at its head-office the equivalent in gold* of the excess-issue, which is to be taken on an average of four weeks ending each Saturday. The law does not in any way appropriate this gold to the note, and, in the event of a bank failing, it would form part of the general assets. The object of the proviso is simply to prevent abuse of the power of issue.

By Scotch custom all half-yearly payments, such as rent, interest on loans and mortgages, farm-servants' wages,

* Silver may also be taken into account to the extent of one fourth of the gold.

&c., are made due in May (Whitsuntide term), and November (Martinmas term), and as a great number of notes are then made use of, the circulation of the Scotch banks shows a large expansion, which must be covered by gold. In order, therefore, to fulfil the requirements of the law, sovereigns are withdrawn from the nearest Branch of the Bank of England (that at Newcastle), and are retained until the circulation contracts to its normal level.

As a rule they are home from their trip to Scotland in six or eight weeks, and so purely formal is the proceeding that it is said the boxes are frequently returned without having even been opened.

By combining the gold circulation with that of notes, we obtain (see Diagram) the normal fluctuations of the currency as a whole

How largely the internal ebb and flow accounts for the variations of the Reserve may be seen by comparing the two. The taxpayer provides most of the large amount that swells the Bank's store between New Year's Day and Lady-Day, the Scotch withdrawals account for the drop in May and November, the requirements of the holiday season for the fall in August, and the payment of salaries, rent, dividends, &c., for the withdrawals at the turn of the quarter.

As it is taken for granted that the state of the Reserve must be the main consideration that the Directors of the Bank of England have in mind when fixing their rate of discount, it will now be interesting to test this assumption by the facts so far ascertained, and to ask whether any connection is discoverable between the changes in the Bank-rate, and those fluctuations of the Reserve which are due to home influences.

The question is soon answered. Between the fluctuations

of the currency and those of the average weekly Bank-rate (see Diagram) it is at once seen that the correspondence is only of the most meagre description.

And, after all, it is hardly reasonable to expect that there should be agreement. All the normal movements of the currency are so well known as to be matters of newspaper notoriety, and the foreknowledge deprives them of importance. The Bank knows, for instance, that gold will be wanted for Scotland at stated periods, and can therefore provide beforehand for the withdrawal. The market also knows it, but, being aware also that the gold is still in the country, and will soon be back, regards the outflow with indifference. The same is true of other cases, and it may be laid down as a rule that the ordinary movements of the currency, being foreseen, are provided for in anticipation, and rarely have effect on the Bank-rate. At the same time it must not be forgotten that, if an outflow for home requirements should happen to coincide with a demand for export, the effect of the latter will to that extent be aggravated; and in this connection it is worthy of remark that the panic of 1857 occurred toward the middle of November, and that of 1866 toward the middle of May, just the periods when the Bank had been weakened by the Scotch withdrawals.

V.

From what we have seen it is evident that but little weight attaches to the periodical rise and fall in connection with the every-day work performed by the currency, and that such ordinary demands may be left to take care of themselves, their nature and extent being too well understood to afford ground for uneasiness, or to call for corrective measures.

With extraordinary demands the case is different. When

credit is good, experience shows that the country will use no more legal-tender than is necessary for its wants, and that the gold and notes taken for temporary purposes will return to London as soon as those temporary purposes are fulfilled. When credit is bad, on the other hand, there is no knowing how much additional currency the country may suddenly ask for, or how long it may keep it. If it asks for too much there will be a panic, because the constitution of the Bank is not adapted to bear an abrupt demand, and the Reserve may melt away before the measures taken to relieve it have had time to act. In any case there is sure to be a sharp rise in the discount-rate, as the Bank on such occasions takes vigorous proceedings to defend its stock, and to gain delay until gold can be attracted from abroad.

The Bank Act, it will be remembered, assigns a limit—now £16,450,000 (January, 1892)—to the note-issue against Securities, and prescribes that for every note issued beyond the limit gold must be held. As our stock of gold is estimated at 110 millions, the total legal-tender currency, with which the business of the country has to be carried on, is about 126 millions, and this sum, under ordinary circumstances, suffices for all requirements. In one all-important particular the Act is defective, however. It makes no provision for a *sudden* expansion of those requirements. A gradual expansion may be met by importing gold from other countries (the only method, since 1844, of increasing the currency), but the contingency of a sudden demand does not appear to have been foreseen when the Act was framed.

When "credit" is good our stock proves sufficient, because, in practice, it is supplemented to an indefinite extent by the use of cheques. But "credit" means belief—the general belief that he who promises to pay is able

to pay, or, in other words, that the drawer of the average cheque has enough money at his banker's to meet it—and if events occur of a nature to weaken that belief the efficiency of instruments of credit will be impaired. Cheques will then no longer pass current, or, at any rate, not to the same extent as before, and business men will revert for a time to the more primitive system of payment by note.

The failure of some great firm, or well-known bank, may, for example, cause merchants to become all at once suspicious of their neighbours' solvency. Each one asks himself who has been involved in the failure, and whether this man or that man is still safe, and until his doubts can be set at rest, determines that, as far as possible, he will avoid the risk of taking cheques, or, if he must take a cheque, that he will at least send at once to encash it. Bankers accordingly find that a great number of cheques, instead of coming forward through the Clearing House as usual, are being presented across the counter. Consequently they have to increase their till-money, and, in order to be on the safe side, they increase it very largely, making heavy inroads on the Bank's Reserve.

The pressure of a London demand alone is sufficient to severely try the Bank's strength, but, to make the matter worse, it may, as in 1866, be aggravated by the demands of Country bankers, who, fearing that the shock to confidence may cause a "run" on the part of their depositors, telegraph to London for more notes.

But perhaps the most striking effect of "discredit" is the sudden scarcity of "market money" that ensues. Bankers, by virtue of their calling, are at all times prone to mistrust, but the disturbance of credit caused by a great and unforeseen failure renders them abnormally suspicious, and they look askance upon every application for money, however legitimate. Besides, until they know what is going

to happen, they naturally deem it prudent to husband their resources, and the result is that they either greatly restrict or totally suspend their usual loans and discounts, leaving their customers to shift for themselves. In addition, too, they at once demand repayment of much of the money lying "at call" with the brokers, and as the brokers can only repay by borrowing elsewhere, a rush to the Bank of England begins.

The Bank being virtually the only lender that remains, all who have obligations to meet run there for money, and in most cases ask for more than they really want at the moment, in fear of not being able to obtain it when they do want it. Under such circumstances the magnitude of the Bank's advances is almost incredible. On a single day in 1866 it advanced upwards of four millions sterling, and in a single week upwards of ten millions—and that, too, notwithstanding a minimum charge of 10 per cent.

A high rate appears to have scarcely any effect in checking applications, and naturally so, for a merchant who has acceptances falling due in the morning must have the money to meet them if he pays 100 per cent. for it.

This heavy borrowing at famine prices has been a characteristic feature of every panic, and enables the Bank to do a good stroke of business, as is shown by the fact that the dividend for 1866, 11 $\frac{1}{4}$ per cent., (against an average of 9 $\frac{1}{2}$ per cent. for 1856—65), is the highest from 1806 to the present time. But while swelling the Bank's profits it also endangers its safety, for a large proportion of the sum borrowed is carried off in cash, producing that rapid and alarming diminution of the Reserve, which is the actual proximate cause of a crisis. Of the ten millions borrowed in 1866, nearly half was thus taken away.

This is not a case of a "run," such as other banks are

subject to. The deposits instead of decreasing actually increase, and it is because the public mistrust each other that they demand notes, not because they mistrust the Banking Department.

As the fall of the Reserve is thus directly attributable to withdrawals in connection with the fresh loans, it may perhaps be thought that if the Bank refused to grant applications it could keep its Reserve, and prevent a panic. But the Bank must lend; it has no choice. If it refused to do so, the brokers, who are the chief borrowers, could not possibly repay the bankers, and the latter would be compelled in self-defence to draw out their balances; a measure the effect of which would be to bring on an immediate crash.

When it becomes known in the City that the Reserve is running low, and that the Bank may soon be perforce compelled to stop lending; when merchants realise that unless more money can be found to-morrow they will be ruined; and when bankers, in an agony of dread lest their customers should take fright, are praying for closing-time;—then the height of the panic is reached, and the general anxiety culminates in a few hours of mental suffering that are long afterwards remembered as the “crisis.”

There is but one remedy, and that an obvious one. The Bank Act must be suspended. As it is evident that more notes are urgently wanted to replenish the Reserve, and as more notes cannot legally be created, except against a deposit of gold,—which it is impossible to obtain at a few hours notice,—the strict letter of the law must be disregarded until the gold has had time to reach us. The spirit of the law is that the issue shall adapt itself to the wants of the country, and, if those wants suddenly and without warning expand, there is no sense in retaining the fixed limit.

The Directors of the Bank accordingly lay a statement of the facts before Government, and the Ministers (who, of course, have no more power than anyone else to override an Act of Parliament) undertake in response to promote a Bill of Indemnity if it should be found necessary to break the law.

It may be asked why, if this step is sure to be taken—and everyone feels convinced that it will be taken before matters come to the worst—why there is ever a crisis at all, and why people should lose their self-possession. The reason is, firstly, that merchants who are in imminent danger of stopping payment cannot possibly keep cool; and, secondly, that there is always some amount of uncertainty as to the delay that may precede the suspension of the Act. It is uncertain whether the Directors will take action in time, uncertain whether red-tapeism may not cause a hitch somewhere, uncertain whether the Reserve will hold out until relief is given, and so on, and it is this leaven of uncertainty that does all the mischief. It was even asserted after the last crisis that, if the responsibility of overstepping the limit had rested with the Directors, conditionally upon their applying afterwards (instead of beforehand) for an indemnity, people's minds would have been at ease, and everything would have passed off quietly.

VI.

Since the passing of the Bank Act in 1844 there have been three “crises,” those of 1847, 1857, and 1866, and on each occasion the Directors of the Bank have received on application a Letter of License from the Government of the day, authorizing them to increase their issue of notes upon securities. In 1857 the Bank at once availed itself of the authorization, but in 1847 and 1866 it was not found

necessary to do so, the knowledge on the part of the public that the limit had been removed having the effect of quieting the feeling of panic.

The crisis of 1857 was brought about by a demand for gold for Scotland, where the failure of two large banks had led to a run on others. Unfortunately, the drain fell on a Reserve that had been suffered to run down to the low figure of £2 $\frac{3}{4}$ millions, though the average of the five previous years had been kept up to £8 $\frac{1}{2}$ millions. On the night of the 11th November it had fallen to £1,462,000, and on the following night to £581.000. The Directors then appealed to the Government for aid, and at midnight a letter was addressed to them by the First Lord of the Treasury, and the Chancellor of the Exchequer, stating that "if they should be unable in the present emergency to meet the demands for discounts and advances upon approved securities without exceeding the limits of their circulation prescribed by the Act of 1844, the Government will be prepared to propose to Parliament, upon its meeting, a bill of indemnity for any excess so issued."

Within twenty-four hours the Reserve was gone, and the law had been broken.

The effect of the letter being to remove the arbitrary limit placed by the Act on the fiduciary issue, which at that time amounted to £14,475,000, all that the Bank had to do was to transfer a parcel of Government Securities from the credit of the Banking Department to that of the Issue Department, to issue notes against the same, and to pass the notes into the Reserve.

The next Return that appeared, that of Wednesday, 18th November, 1857, is interesting as being the only one that shows an actual infringement of the Act; for, though the excess-issue of two millions was retained for some time afterwards as a precautionary measure, the Reserve in the

following week had risen to £2½ millions, and the Banking Department was therefore in a position to cancel the loan. The Return was as follows :—

ISSUE DEPARTMENT.	
Notes issued.....	£22,554,595
N.B.—Of which two millions are issued under the authority of the letter from the First Lord of the Treasury and the Chancellor of the Exchequer.	
	£22,554,595
	£22,554,595
BANKING DEPARTMENT.	
Proprietors' Capital ..	£14,553,000
Rest	3,433,500
Public Deposits	5,483,881
Other Deposits	13,959,165
Seven Day & other bills	829,544
	£38,259,090
	£38,259,090
Government Debt	£11,015,100
Other Securities	5,459,900
Gold Coin and Bullion ..	6,079,595
Silver Bullion .....	..
	£38,259,090
Government Securities	£6,407,134
Other Securities	30,299,270
Notes	1,148,185
Gold and Silver coin ..	404,501
	£38,259,090

As soon as it became known that the restriction had been removed, matters began to mend. Discount houses being able to obtain a plentiful supply of money from the Bank, at once began to grant liberal accommodation to their customers, and the crisis of 1857 was at an end.

The suspension of the Act, it is to be observed, in no way interfered with the principle of convertibility, and the Bank remained under precisely the same obligation as before to pay its notes in gold on presentation.

The panic of 1866, which is still well remembered by many business men, was precipitated, if not caused, by the downfall of Overend, Gurney and Co., a great firm of bill- and discount-brokers, whose name was almost as well known throughout England, and, indeed, throughout Europe, as that of the Bank itself. To be "as rich as a "Gurney" denoted fabulous wealth, and the announcement of the failure created universal consternation. Country bankers, fearing the effect that the news might have on the minds of their customers, telegraphed at once to their

London Agents for notes, or ran up themselves by the next express to fetch them. In many instances these fears were only too well justified, and the safety of numerous banks was imperilled by the large withdrawals that took place.

Again, as ill-luck would have it, the Reserve stood at an exceptionally low point. Trouble had been brewing between Austria and Italy, and there had been an export of gold to the latter country. The usual Scotch withdrawals had also taken effect. On the evening of the 9th May the Reserve amounted to £5,800,000, against an average for the five previous years of over eight millions. On the 11th ("Black Friday"), the day of the failure, £2 $\frac{1}{4}$ millions were drawn out in notes, and at the close of business the Directors estimated that the available stock of cash in London and all the Branches was down to £3 millions, a sum which, it was believed, would be wholly swallowed up in the morning. It was therefore deemed advisable to submit the facts without further delay to the consideration of Ministers.

At once a reply was returned, signed by Earl Russell and Mr. Gladstone, saying that if "the Directors of the Bank of England, proceeding upon the prudent rules of action by which their administration is usually governed, shall find that, in order to meet the wants of legitimate commerce, it be requisite to extend their discounts and advances upon approved securities, so as to require issues of notes beyond the limits fixed by law, Her Majesty's Government recommend that this necessity should be met immediately upon its occurrence, and in that event they will not fail to make application to Parliament for its sanction. No such discount or advance, however, should be granted at a rate of interest of less than ten per cent."

All fear of an actual collapse was now removed, but it was long before the country recovered from the fright. Bank-rate had to be maintained at 10 per cent. until the

middle of August—a period of three months—and it was not until the end of the year that the Circulation contracted to its normal level.

The leading items in the Bank-Retuns varied as follows:

1866.	Circulation	Other Deposits	Other Securities.	Reserve.
9th May ..	£22.3 millions.	£13.5 millions.	£20.6 millions.	£5.81 millions.
16th " ..	26.1 "	18.6 "	30.9 "	1.20 "
23rd " ..	25.5 "	18.8 "	31 "	1.39 "
30th " ..	26 "	20.5 "	33.4 "	.86 "
6th June ..	25.5 "	20.2 "	31.8 "	2.83 "

The lesson taught by the events of 1866 speedily bore fruit. Recognizing the fact that a substantial Reserve is the one great safeguard against a recurrence of panic, the Bank increased its till from eight to twelve millions, and has since raised it to an average for the ten years ending December, 1890, of above £13 millions.

After a failure of credit comes the sequel, namely: stagnation of trade, and cheap money.

As merchants will no longer trust each other so far as before, they give smaller credits and transact less business. Capital goes “on strike,” as it were. Consequently, fewer bills are created; and as bankers distrust bills generally, and will take none but the best, the supply of money quickly overtakes the effective demand, and rates fall away.

After the disaster of 1866, Bank-rate dropped steadily from ten per cent. to two per cent., and remained at its minimum for the protracted period of sixteen months. The minor catastrophes of 1875 and 1878 were also followed by low rates, and, in fact, the lowest averages of the twenty years, 1869-88, are those of 1876 and 1879, whilst the average of 1868 is the lowest since the date of the Bank Act (see Diagram No. 1.)

VII.

If our internal requirements for currency purposes were the only consideration that need weigh with the Bank in determining the price of its loans, it is probable that in normal times the advertised rate could be maintained at an almost permanent figure, and that changes would occur only rarely and under exceptional circumstances.

But the Reserve has to fulfil a double function. In addition to being the only stock of currency that is available for home use at an emergency, it is also the most readily accessible store of gold to be found in Europe, and is peculiarly exposed to foreign demands.

Whenever a foreign nation happens to want gold, whether to strengthen bank-reserves, for coinage purposes, as backing to a note-issue, or for any other purpose, the quickest and least troublesome way of obtaining it is to buy bills on London, remit them here for discount, turn the proceeds into Bank of England Notes, and cash the notes at the Issue Department.

Hoards of gold have also been accumulated by the State Banks of France, Germany, and other countries, but these banks have no mind to surrender without a struggle that which it has cost them so much trouble to get together, and they usually succeed in opposing such obstacles to an export-demand as to turn it effectually aside.

Here it is different. Our store is open, without let or hindrance, to all the world : and no item of the "money-article" is more familiar than the announcement that gold to such and such a value has been taken out of the Bank for shipment to New York, or to Buenos Ayres, or to Portugal, and so on.

These movements are of the greatest importance, as their influence on the Reserve is direct and immediate. Every export diminishes the power of the Bank to pay its debts;

and if the outflow reduces, or threatens to reduce, the Reserve below safety-point, the rate will have to be raised in order to check the efflux and to attract gold from other quarters. To a great extent, therefore, the Bank is guided by the general tendency of these movements in the adjustment of its rate of discount;^a and, as other dealers anticipate its probable action by advancing their quotations when gold is going out, and lowering them when it is coming in, the price of money may in many cases be said to depend on the ability and will of other nations to deprive us of our stock of gold.

The Bank's transactions in bullion are so large and so frequent as to constitute an important part of its business, and the gold held by the Issue Department to provide for the payment of its notes is largely made up of bars and foreign coin, which are in constant demand for export purposes.

With regard to bars it has already been stated that the Bank buys at the price fixed by Act of Parliament of 77/9 per ounce standard, and sells at 77/10½, raising the selling price to 77/11, when the strength of the demand justifies an advance.

Foreign Coin is dealt in on the same principle. As English standard gold is 22 carats fine, that is to say, contains 22 parts pure gold in 24, while the standard of French, German, American, and most other gold coin is nine-tenths fine,^b the equivalent buying price for the latter should be 76/4 per ounce ($\frac{22}{24} : \frac{9}{10} :: 77s. 9d. : 76s. 4d.$) This assumes that the foreign mints work with absolute exactness, but allowing one-half per mille for possible shortcomings in this respect, we get 76/3½, which is the rate

^a The rate of discount, said the Governor of the Bank in 1861, is changed "for one purpose only—the purpose of keeping the reserve fund at a proper and safe limit."

^b Only England, Russia, and Portugal employ the proportion of eleven-twelfths fine for their gold coin.

the Bank usually pays. If the coin bought at this price had actually to be melted and re-minted, the purchases would show a loss; but there is no necessity to send it to the Mint, as it is sure, sooner or later, to be wanted again for export, and the Bank need only lock it up until it is asked for. The selling price is 3d. or 3½d. per ounce higher, equal to a profit of about $\frac{1}{2}$ per cent. If a run is made on any particular coin, such as Napoleons, or American Eagles, the Bank can stay the outflow for a time by putting another penny on the price. Thus, supposing that it just covers expenses to take Napoleons from the Bank when the French exchange stands at 25.17½, and the price at 76/6½, then an advance of a penny would stop the export until the exchange had receded to about 25.15.

Though a change is now and then made in the selling price of coin, the rate at which the Bank buys is practically fixed. It has been pointed out, however, that if a little more could be offered at times when it was desirable to attract gold hither, the advance in price would produce a more certain and more direct effect than that of an advance in the Bank-rate, which, at best, is but a roundabout way of inducing imports. As it is probable that the Bank never has to melt its foreign coin, it would cause no actual loss to pay 1d. or 2d. more per ounce, though of course it would reduce profits. On the other hand, there is no article in the world that responds so readily to a paying demand as gold, and, frequently, a slight rise in price would make all the difference between profit or no profit on an import.*

For the ten years 1881-90 the average result of the movements to and from foreign countries was as shown in Diagram No. 10, and, for purposes of comparison, the actual fluctuations in the Bank's stock of gold are also displayed.

* In May, 1891, the Bank raised its buying price for American gold coin to 76/6½ per ounce, and the measure met with complete success, very large shipments being at once made to us from New York. (See *New York Financial Chronicle*, May, 1891.)

It is seen that in the spring our commercial and banking transactions with the rest of the world leave a balance in our favour, which is remitted to us in gold, but that in the autumn, when we are importing and paying for our share in the world's harvest, the balance turns against us, and the gold ebbs away. A reference to the average Bank-rate (Diagram No. 9), will show how closely the latter sympathizes with these movements. The year opens with gold at its lowest, and the rate at its highest. As the metal flows in, the rate gives way; flood-mark is reached about Midsummer, and then comes the reflux, which is held in check by again raising the rate.

In order, however, to make the connection clearer, the foreign gold movements for the ten years* are in the next following Diagram placed side by side with those of the Bank-rate for the same period, and, on inspection, it is clear that we have now found a clue to the latter. As the metal comes in, so the rate falls; as the metal goes out, so the rate rises; and, taking one year with another, it may safely be said that a net gain to the Bank of a million from foreign imports corresponds to a one per cent. drop in the rate, and a loss of that amount to a one per cent. rise.

To exemplify this principle in greater detail we will take the movements (see Diagram No. 13) that occurred in the year 1887, which opened with a stock of gold of £19,300,000, and a 5 per cent. rate.

By the end of April the Bank had gained three millions from foreign imports, and had reduced its rate by three

* It is necessary to observe that the gold movements here shown include the import of about £5 millions, which the Bank obtained from France, Russia, and elsewhere, in the latter half of November, 1890. This produces a disturbing effect on the gold-line, and, being an altogether exceptional operation, ought in strictness to be eliminated. By deducting £500,000 from the end of November onward, the two curves are brought more into agreement.

per cent.; by the end of August this gain had been reduced by two millions, and the rate raised by two per cent.; and from then to the end of the year the rate remained stationary, and imports about balanced exports. Thus a gain of three millions corresponded to a fall of three per cent., and a loss of two millions to a rise of two per cent.; while during the period in which the Bank neither gained nor lost no change was made.

It may be taken for granted, then, that the statistics of the Bank's gain or loss of strength from the gold sent into or out of the country form the best groundwork on which to base a forecast of the future course of the market; but at the same time it must not be assumed that the connection is always so close and clear as in the instance given. Due allowance must also be made for other influences, such as the general condition of the markets, the state of trade, the political outlook, &c., all of which are considerations that the Directors, doubtless, take into account before deciding on a change of rate.

But, on the whole, the broad principle to be kept in view is this, that if the country is losing gold, the necessity of defending the Reserve will compel the Bank to raise its rate; while, on the other hand, the necessity of earning a dividend for its stockholders will induce it to lower it again as soon as practicable, in order the better to compete with its rivals in the loan market.

CHAPTER VIII.

THE FOREIGN EXCHANGES.

I.

AN enquiry into the diverse influencos that tend to the enhancement or to the depression of the loan-value of capital would be wanting in completeness unless it included some attempt to investigate the cause of those movements to and fro of gold, which prove, as we have seen, to be the most potent factor in the determination of its price, or, at any rate, of its price as indicated by the advertised discount-rate of the Bank of England ; and to this end we now turn to the subject of Foreign Exchanges, under which general but indefinite designation are classed all those transactions which have for their object the transmission of capital from one country to another. ,

(In its elementary form international trade consists simply of an exchange of commodities. To facilitate settlement, however, each country expresses the value of its exports in gold or silver—"the common denominators of exchange"—and liquidates its foreign dealings by means of bills of exchange.)

Just as the payments to be made and received in the course of our home-trade are balanced against each other by an interchange of cheques in the Clearing-House, so the payments that have to pass between different countries in settlement of foreign transactions are balanced against each other by an interchange of bills on the various Bourses, or International Clearing - Houses. Those who have exported goods to other countries go there to sell their drafts, and thus obtain pay-

ment, and those who have imported goods from other countries go there to buy remittances, and thus make payment.

Now, if the dream of an international currency should ever be realized, and if on a given day the demand on 'Change for bills on, let us say, Germany, were just equal to the supply, then 100 units of currency would buy a bill for 100 units, and exchange would be at Par.

The expression "Par of Exchange" means an equipoise of the exchanges, and indicates a condition of affairs in which the demand for and supply of bills balance each other. Whenever they so balanced, exchange would be visibly at par; and conversely, whenever the exchange between any two countries stood at par, we should know for certain that their claims on each other were equal. This supposes the existence of an international currency; but, as different countries assert their independence by employing different systems, the exchange does not in practice take so simple a form. Nevertheless, it is still true that if the supply of bills on, say, Germany fits the demand, the exchange (which in this instance is expressed as the number of Reichsmark that are given for £1 sterling) must be at par. The difficulty is, however, that we have no means of ascertaining whether and when demand and supply do so balance; and consequently it is impossible ever to know what the *true* Par of Exchange between England and Germany, or between England and any other country, really is.

As a substitute for this ideal Par, cambists have adopted what is known as the Mint Par of Exchange. This is obtained by establishing a comparison between the currencies of the countries concerned, based on the weight and fineness of precious metal contained in their respective standard coins. The relationship, for instance, existing between the English sovereign and the French franc de-

pends on the Mint Regulations of the two countries, which ordain that:—

- (a) 480 ounces Troy of Gold, $\frac{11}{12}$ ths fine, shall be coined into 1869 Sovereigns;
- (b) 1000 grammes of Gold, $\frac{9}{10}$ ths fine, shall be coined into 155 Napoleons (of 20 francs each).

Given that 1 oz. Troy is equal to 31.1035 grammes, we ask

How many francs = 1 sovereign ?

if sovereigns 1869 = 480 oz. Gold, $\frac{11}{12}$ ths fine,

if ounces Standard 12 ... = 11 oz. Fine Gold,

Ditto 1 ... = 31.1035 grammes,

if grammes Fine Gold 900 = 3100 francs :

and obtain the result

$$\frac{480 \times 11 \times 31.1035 \times 3100}{1869 \times 12 \times 900} = 25.2215.$$

meaning that the same quantity of pure gold is contained in one sovereign fresh from the Mint as in $25\frac{2}{100}$ francs (basing their value on that of the Napoleon). The Mint Par between England and France is therefore

25.22 francs for £1.

A Mint Par can only be established between countries that employ the same standard of value. It cannot be fixed between a country with a gold standard and one with a silver standard, because there is no fixed ratio between the value of an ounce of gold and that of an ounce of silver. The value in England of an Indian Rupee, or of a Mexican Dollar, is determined by the price of silver in the London market; and the value of a sovereign in India, by the price of gold in the Calcutta market. ✓

The Mint Par, again, is not affected by deficiencies of weight or fineness in the standard coin, or by the charges made for coinage, &c. It is pretty certain that 1550 average

Napoleons would not lift the scale at ten Kilogrammes or 1869 sovereigns at 480 ounces, but the difference does not affect the Mint Par, which, being purely theoretical, is concerned only with the theoretical weight and fineness, and is therefore unalterable.

II.

When our claims on another country about equal theirs on us, the ones pay for the others, and exchange is at par.

But it can only very rarely happen that there exists anything like an equivalence of claims. Almost invariably the bills "cleared" on 'Change must, and do, leave a balance against one country or the other; and it is this fluctuating balance that affects the exchange, and produces the constant oscillations of the rate. .

If, on a given day, the balance of indebtedness between England and France should be against England, that is to say, if we have to pay more to France than France has to pay to us, there will be competition on 'Change for the bills on offer, and the price will naturally rise. Those who have to make remittances to France will have to either bid more for bills than their par value, or go without. ✓ The intrinsic value of 100 sovereigns is 2,522 francs; but buyers will have to pay more than £100 for a bill of 2,522 francs, and, if France had the same currency that we have, would have to pay more than £100 for a bill of £100. In other words, bills on France will be at a premium. ✓

To beginners, the question of a premium on the exchange usually appears to be a stumbling-block. They readily understand that a bill may be worth less than its face-value, but how it can ever be worth more they fail to see. And yet the principle is quite familiar in every day life, though it presents itself under a different aspect. Suppose, for

instance, you wish to send a sovereign to your young brother at school, how will you manage it? Probably either by buying a Postal Order, for which you will have to pay 1½d., or by sending the coin itself, and paying 2d. registration fee. Such being the case, what is the charge of 1½d. but a premium on the exchange? Because it would cost 2d. to send the coin, you prefer to give 20/1½ for a bill of 20/-; and, on the same principle, a merchant who has to remit £1000 to Paris will pay more than £1000 for a bill, rather than go to the expense of sending gold. Of course, if it cost 10/- per cent. to transmit gold to Paris, he will not pay more than 10/- per cent. premium on the bill. Nor would you give more than 2d. for the Postal Order. In the one case as in the other the premium cannot rise beyond the cost of remitting coin.

Assuming, then, that the balance be against us, bills on the other country concerned will be in request here, and will go to a premium. But because the quantity of paper tendered for sale on 'Change falls short of the demand, it by no means follows that some of the intending buyers will have to return empty-handed, or that the exchange will at once leap to the gold-moving point. Bills, like most other things, are always to be had at a price, and, if the amount on offer is inadequate, the broker who has buying orders to execute will apply to one of the "Foreign Bankers," or bill merchants, who are always ready to draw on their Continental correspondents to any amount that may be required: but, as the Foreign Banker will only draw at a rate that covers all expenses of a counter-remittance, together with his correspondent's commission, if any, and some remuneration for himself, the price he charges will of course be above par, and will go a long way towards fixing the price obtainable by other sellers. The actual extent of the rise will depend on

the equation of two forces: the strength of demand on one hand, and the competition of other bankers on the other.

Although the indebtedness of the individual is discharged by the remittance of a banker's draft, that of the country as a whole will remain as it was until the banker covers his correspondent. Either gold, or securities or bills on other countries will serve this purpose, but under all ordinary circumstances bills of exchange form the cheapest and most convenient mode of remittance. The banker compares the rates ruling in the place to which he has to remit (which are telegraphed to him by his correspondent on the morning of Exchange-Day), and gives the preference to those which will yield the best return. If he has drawn on Germany, for instance, he may probably remit bills on Russia or Austria, if on France, bills on other countries of the Latin Union, and so on. This explains the tendency of the exchanges to rise or fall in groups, and shows why an important advance in the price of bills on France is generally (in the absence of special influences) accompanied or followed by a secondary advance in the prices of those on Belgium, Switzerland, and Italy.

Ultimately, therefore, an adverse balance is discharged, for the time being, by transferring to the creditor-country a portion of the debit-balance due to us by other nations.

But such a balance may last for weeks together, and every Exchange-Day bring with it a demand for bills, which can only be met by having recourse to the foreign bankers, who continue issuing drafts, and buying up other bills for cover.^v Of course, the longer this goes on the scarcer and dearer will these other bills become, and in proportion as the banker pays more for his remittances so he will have to charge more for his drafts. In the end even—if the adverse balance is large enough, or lasts long enough—other means of remittance may become so expen-

sive that it will pay him better to cover his drafts by buying gold from the Bank of England at tariff-price, and shipping it to his correspondent, who will sell it to the Bank of France, or to the Reichsbank, as the case may be, at their tariff-price, and credit him for the proceeds. The price of bills is now said to have reached "Specie Point," and can go no higher (save in very exceptional cases, such as the outbreak of war).¹

"Specie Point," which demands particular attention, is the rate of exchange produced by buying gold in one country, and selling it in another. If this operation could be carried out without expense, Specie Point would be identical with the Mint Par, which, as we know, is the value of a given quantity of gold expressed in different currencies. But an export involves charges. The metal must be packed, insured, and shipped, and, in addition, brokerage and commission may have to be paid. Deduct these charges from the Mint Par, and you have the rate at which gold goes out; add them, and you have the rate at which gold comes in. For instance, gold of the value of £1000 is worth 25,220 francs; but if we assume the inclusive cost of transmission to be $\frac{1}{2}$ per cent., then the outlay necessary to produce 25,220 francs will be £1000 + $\frac{1}{2}$ per cent., or £1005. This is equivalent to an exchange of 25.09 $\frac{1}{2}$, so that, if bills on France should rise in value to such an extent that £1000 will only purchase Fcs. 25,095, exchange will have touched the outgoing Specie Point.

It is obvious that the price of bills cannot rise beyond this point, for, rather than pay more, merchants would ship bullion themselves; and gold, it must be remembered, can always be had at one fixed price of £3 17s. 10 $\frac{1}{2}$ d. per oz English Standard.

Unlike the Mint Par of Exchange, Specie Point cannot be fixed with exactness. All depends on the charges that have to be paid. One banker may be so situated as to have

no brokerage or commission to pay, and, perhaps, by undertaking the operation on a large scale, may also effect a saving on the freight and insurance, and so be able to snatch a profit in cases where another banker, selling drafts at the same price, would not get his money back. The most we can say, therefore, is that while gold will inevitably be shipped when the exchange attains a certain level, there is also strong probability that it will begin to move much earlier; and, as a matter of fact, withdrawals are frequently announced when the exchange is as much as four or five points distant from the theoretical Specie Rate. *¶¶*

III.

All business in Foreign Bills in this country centres on the Royal Exchange, where buyers and sellers meet twice a week, on Tuesdays and Thursdays.

'Change is over about three, and immediately afterwards the leading brokers issue a Course of Exchange, or price-list of bills, of which the following is a type:—

COURSE OF EXCHANGE,
London, 8th March, 1888.

On	Usance.	Prices.	
Paris	Cheque	25.28 $\frac{1}{4}$	= Francs and Centimes for £1.
France	3 Mos.	25.45	= ditto
Belgium	"	25.46 $\frac{1}{2}$	= ditto
Germany	Short	20.36	= Reichsmarks and pfennigs for £1.
"	3 Mos.	20.49	= ditto
Holland	Short	12.1 $\frac{1}{4}$	= Florins and stivers for £1.
"	3 Mos.	12.2 $\frac{3}{4}$	= ditto
Italy	"	26.10	= Lire and centesimi for £1.
Switzerland	"	25.52 $\frac{1}{2}$	= Francs and centimes for £1.
Petersburg	"	18 $\frac{1}{2}$	= Pence for 1 Rouble.
Vienna	"	12.85	= Florins and Kreutzers for £1.
Trieste	"	12.90	
Madrid, &c.	"	46	= Pence for 1 Peso.
Lisbon and Oporto ..	"	52 $\frac{1}{2}$	= Pence for 1 Milreis.
Copenhagen	"	18.33	= Kronor and öre for £1.
Stockholm	"	18.35	= ditto
New York	Short	49 $\frac{1}{4}$ - 49 $\frac{3}{4}$	= Pence for 1 Dollar.

The London Rates of Exchange divide into two groups. In the one the amount of foreign money is stated that exchanges for one pound sterling; in the other, the amount of sterling that exchanges for one unit of the foreign currency. Most of the extra-European exchanges, such as New York, Calcutta, China, Brazil, Buenos Ayres, Chili, Peru, Mexico, &c., fall into the latter division, being quoted in shillings and pence, but all the Continental rates, with the exception of Russia, Spain, and Portugal, are rendered in foreign money.

On the Continent generally the rule obtains of stating all rates in the home-currency, like ordinary prices. This is the natural and more simple method; but the London system, although somewhat perplexing on first acquaintance, possesses the advantage of enabling easy comparison to be made between the rates current here and abroad. Paris, for example, quotes London in francs and centimes, and, as we quote Paris in the same way it is seen at a glance whether and to what extent the rates differ. On the other hand, if it were the custom here to quote the Continent in sterling, and if, while Paris gave the price of cheques on London as, say, 25.27½, we priced Paris cheques at 15/9½ for one Napoleon, it is obvious that the identity of the two quotations could not be established without calculation. It has accordingly become the usage to state the exchange here as it is stated abroad; and as Paris, Antwerp, and Zurich quote London in francs, London quotes them in francs, while as Lisbon, Calcutta, Rio, &c., quote London in pence, we do the same to them.

To this useful rule there is a notable exception. In the Course of Exchange it will be seen that New York is rendered in pence for \$1, notwithstanding the fact that the London rate in New York is always expressed in dollars for £1. There appears to be no reason for this departure from

the usual practice, nor is any advantage gained by it, and it is to be hoped that the anomaly will some day be abolished.*

No difficulty need be experienced in dealing with a rate expressed in foreign money, if only the bearing of the rise and fall be clearly kept in view. In this case a rise of the rate is of course equivalent to a fall in price, and a rise in price to a fall of the rate. The following report:—"On "Change to-day bills on Germany and Russia were in "increased demand at advancing prices, while Austrian and "Spanish remittances were more offered," means that the German and Spanish rates fell, while the Russian and Austrian rates rose. If you have bills on Germany to sell you try to obtain as low a rate as possible, and, if you are buying, to buy as high as you can. Heavy sales cause the exchange to advance; heavy purchases cause it to recede.

When a rate in foreign money rises above par, bills are at a discount, and when it falls below they stand at a premium; but, as it would sound odd to say that the exchange had fallen to a premium, or risen to a discount, these terms are in practice avoided, and we say instead that the exchange has moved for or against us, or, simply, that it is higher or lower.

The expressions "favourable" and "unfavourable" exchange are also constantly met with. A favourable exchange is one that tends towards the incoming specie-point, and is so styled because an inflow of gold produces an increased Reserve, and cheaper money. An unfavourable exchange, on the other hand, points to an export of gold, and dearer money. It will be found useful to bear in mind that all the Continental exchanges (except Russia, Spain, and Portugal), are favourable when above par, and unfavourable when below, or, in other words, that *high rates are for us, and low rates against us.*

* Petersburg and Madrid are also exceptions. Both formerly quoted London in pence, but Petersburg now states the exchange in roubles for £10, and Madrid in pesetas (francs) for £1.

IV.

In explaining the Theory of the Exchanges it is conducive to simplicity to disregard at the outset the element of time, and to assume that an ordinary transaction takes the shape of an immediate payment in one country in order to receive the immediate equivalent in another, or, what amounts to the same thing, to assume that cheques are in all cases dealt in.

A glance at the Course of Exchange, which reflects the business that actually takes place, will however dispel this idea. As a matter of fact the great majority of the quotations apply to bills of three months' currency, and the only Continental "cheque-rate" that we quote is Paris, though Germany and Holland are also given "short" (sight to eight days). The sight-exchanges often referred to in the Money Article are not London rates, but the quotations current abroad. We are not saying that cheques on other countries are not to be had here. A foreign banker will, if desired, draw "at sight" on Palermo, or Prague, or Cadiz, or almost any other town of importance, but as there is no recognized quotation for cheques, the transaction is out of the ordinary course, and the banker "makes a price."

In practice then we hear very little in London of the sight-rate to which such prominence is given in theory, and the average exchange transaction consists of an immediate payment on this side in order to receive the equivalent abroad three months hence. Under these circumstances it will clear the ground if we ask, in the first place, how the long rate is arrived at, and what relationship exists between the price of a bill at three months, and the price of a cheque. To state a case, say that I have made purchases in France, and the time

having arrived for payment, have the choice between remitting a cheque, or a three months' bill; if the cheque would cost me 25.80 per £1, what ought I to pay for the bill? Obviously the difference in price will mainly depend on the rate of interest ruling in France—not on the English rate—for either my correspondent will credit me for my remittance in three months time, charging interest meanwhile at French bank-rate on the balance due to him, or, as is more likely, he will discount the bill with his banker, and credit me at once for the proceeds. If bank-rate is four per cent. in France, the charge on a three months' bill will be one per cent., and I shall therefore expect to buy the bill one per cent. cheaper than the cheque, or at 25.55. The price I pay must also cover the expense of the foreign bill-stamp ($\frac{1}{2}$ per mille), which brings the rate up to 25.56 $\frac{1}{2}$.

Another consideration will also influence me. I shall be under liability on my endorsement until the bill is actually paid, and the longer it runs the greater will be the risk. In three months time drawer and acceptor may have failed, or war might have broken out. For this risk I must also be compensated by some allowance in price, which is of the nature of an insurance premium, and will be greater or less according to the standing of the other parties to the bill, and to the general state of credit. If I tax my chance of loss on that score at $\frac{1}{2}$ per mille, the result will be that I shall consider 25.57 $\frac{1}{2}$ for a three months' bill as the equivalent price to 25.30 for a cheque.

The long rate, therefore, is based upon the sight rate, rising and falling in agreement with it, and the amount of its deviation depends on the rate of discount ruling in the country upon which the bill is drawn, and on the state of credit. In other words, demand versus supply produces

the short rate, and demand versus supply, plus interest at the foreign rate, produces the long rate.

It hence follows that while the short exchange cannot move independently of the long, the long exchange can and does move independently of the short.

This clearly appears in the adjoined diagrams, in the upper of which are given the three months' rate, and the cheque-rate, on Paris during the year 1888, and, in the lower, the variation between the two, together with its cause—the changes on the other side in the current discount-rate.

Reverting to the question of interest, there is another point to be noticed. In Paris, Berlin, and other centres, the market rate of discount is usually below the official rate, as in London, and my Paris correspondent ought accordingly to charge me less than four per cent. If he charges only three per cent., while I can succeed in buying the three months' bill on the basis of bank-rate, it will evidently cost me $\frac{1}{2}$ per cent. less than I am supposed to be paying. But the seller of the bill is also well aware that discount in Paris is "below the Bank," and will try to secure the margin for himself by selling, if possible, on the basis of the market-rate; so that either the more pertinacious will get the better of the bargain, or we shall have to split the difference by taking the rate as $3\frac{1}{2}$ per cent.

In the Course of Exchange shown above Paris is quoted $25.31\frac{1}{4}$ (middle price) for cheques, and $25.47\frac{1}{2}$ for three months. Discount at the Bank of France was then $2\frac{1}{2}$ per cent., and in the market two per cent. Adding to the

Cheque rate	...	...	...	...	...	...	$25.31\frac{1}{4}$
the Stamp duty, $\frac{1}{2}$ per mille	...	...	...	...	...	...	$1\frac{1}{4}$
and 3 mos. discount at $2\frac{1}{2}\%$ (the middle rate)							$14\frac{1}{4}$

we arrive at $25.46\frac{1}{4}$

making the three months' bill at 25.47½ a trifle cheaper than a cheque, as might be expected.

Germany and Holland are usually quoted "short" as well as "long," but for the rest of Europe only the three months rates are given, and if we wish to know the approximate sight-rate we must look for the foreign quotations for cheques on London, which will be found, together with the discount-rates, under the telegraphic "Commercial Intelligence" in the newspapers.

It may be remarked in passing that, considering how close a connection exists between the long rate of exchange and the discount-charge of the country upon which a bill is drawn, it is somewhat surprising that no Course of Exchange published here should state the various bank-rates. In most of those issued abroad the exchange and the discount-rate stand side by side, but London brokers, for reasons of their own, do not appear anxious to give more information than they can help.

Mention has been made of "the general state of credit" as a factor in the long-rate. To a certain extent this consideration must always influence the buyer of a bill, but it is only in rare cases that we can lay our finger on a movement of the exchange that is distinctly due to disturbance of credit. The following instance will, however, illustrate what is meant. In January, 1882, there was a crisis in Paris, brought on by over-speculation, and many failures occurred. The London exchange on Paris moved as follows:—

1882.	Cheques.	3 Mos.	Difference.	Discount in Paris.
12th Jan... .	25.25	25.57½	32½c.	5 per cent.
19th " ..	25.20	25.55	35c.	"
26th " ..	25.13½	25.50	36½c.	"
2nd Feb... .	25.15	25.53½	38½c.	"

The margin between short and long increased, it is seen, from 82½c. to 88½c., although discount in Paris remained at the same figure.

To quote another case, in April, 1885, news was received in London of an affray between Russian and Afghan outposts at Penj-deh, and it was believed for a time that England would be drawn into war with Russia. The movements of the 3 months rate on St. Petersburg were :

2nd April ..	24½	pence	...	Dis. 6 per cent.
7th , ,	23½	"	..	"
9th , ,	21½	"	...	"

and speak for themselves.

CHAPTER IX.

THE FOREIGN EXCHANGES (CONTINUED).

I.

THE Foreign Exchanges, it has been well said, are the barometer of the Money Market.

Between the price of London bills, as expressed in the current rate of discount, and the price of foreign bills, as expressed in the current rates of exchange, there exists at times a close sympathy,—a fact of which we are frequently reminded in the Money Article, where, as in the following instances :—

“ On ‘Change to-day bills were offered at higher rates
“ owing to dearer money.”

“ Rates for money have a downward tendency, and,
“ as a consequence, the exchanges are moving
“ against us.”

“ Owing to the advance in the New York Exchange
“ there has been a marked decline in discount-
“ rates during the past week.”

reference to the position of the one constantly serves to explain a rise or fall of the other.

Before discussing the causes and import of this connection it will be well to make sure that we understand what is meant by saying that the exchanges have risen or fallen. In Diagram No. 14 we find the following movement in January :—

Date.	8 mos. bills.	Cheques.	Dia. in Paris.
12th Jan.	25.50.....	25.31 $\frac{1}{4}$	2.6%
19th , ,	25.45	25.26 $\frac{1}{4}$	2.6%
	5c.	-5c.	..

Here the sight-rate dropped 5c., and as discount in Paris remained unchanged, the long rate was also marked five points down. Clearly this was a fall of the exchange.

At the beginning of May is a similar instance of a rise :

Date.	3 mos. bills.	Cheques.	Dis. in Paris.
3rd May	25.47½	25.28½	2.2%
10th , ,	25.53½	25.35	2.2%
	+ 6½c.	+ 6½c.	..

But now notice the following :—

Date.	3 mos. bills.	Cheques.	Dis. in Paris.
6th Sept.	25.57½	25.42½	2%
4th Oct.	25.70	25.42½	3.8%
	+ 12½c.	..	+ 1.8%

If Paris were only quoted long it would be easy to mistake this movement of the 3 months rate for a rise of the exchange; but, as a matter of fact, there was neither rise nor fall, the advance in the long quotation being simply a widening of the difference between short and long, caused by the upward movement of discount in Paris.

Here again is a case where the long rate, taken by itself, might lead us astray :—

1888.	3 mos. bills.	Cheques.	Dis. in Paris.
2nd Feb.	25.45	25.25	2.6%
16th Feb.	25.45	25.27½	2.2%
	..	+ 2½c.	- .4%

As the cheque gained one per mille, there was a rise in the exchange, which ought to have carried up the long rate as well; but a simultaneous decline in discount also occurred, and as the two influences happened to exactly balance each other, the 3 months price remained unaltered.

It is plain, therefore, that a rise or fall of the exchange affects both short and long rates alike, but that while in the former case its force is always manifest, in the latter it

may be obscured by the action of other influences to which the time-price is subject. Consequently, if only the long rate is available for reference, these other influences must be eliminated before we can safely say that a particular movement is due to changes in the ratio between demand and supply.

If "cheques" on other countries were quoted here, there would be no need to trouble about the vagaries of the price of 3 months paper, but as the latter alone appears in most exchange-lists, and as brokers decline to make the price intelligible by stating the discount-rate upon which it is based, the study of the exchanges is attended by practical difficulties, which, if London quotations were the only sources of information open to us, would render it almost unapproachable. Fortunately, however, there is an easy way out of the difficulty, for we can always follow the variations through the foreign quotations for cheques on London given in Reuter's Telegrams. ✓

The relationship that has been referred to as existing between the fluctuations of the exchanges and those of money is of the nature of cause and effect, and the link that brings them into connection—the agency that transmutes a rise or fall in the price of foreign bills into a like movement of discount rates—is gold, the ebb and flow of which, while regulating the action of the Bank of England, and, through the Bank, that of the market, is itself regulated by the demand and supply of means of remittance. As might be expected, it is when specie-point is within measurable distance that this connection is most apparent, but at all times some semblance of agreement is traceable between the respective price-waves, and it may be laid down as a general rule that discount tends to harden on a decline of the exchanges, and to weaken on an advance. Rising exchanges have thus come to be associated with the

idea of cheaper money, while falling exchanges are regarded with disfavour as being the forerunner of a possible bullion-drain and of its inevitable accompaniment—dear money.

The principles that underlie a rise or fall are under these circumstances the next subject that suggests itself for enquiry. It is necessary, however, to premise at the outset that as the international dealings of which the exchanges represent the settlement are too varied and too complex to be known as a whole to anyone, it is not possible to assign every fluctuation to its specific cause; and that, though a knowledge of the principles that determine such fluctuations is of great value as a guidance, it is capable only of general application, and cannot be relied upon to solve the meaning of each particular rise or fall.

For what purpose, let us first ask, are bills purchased, and why are there more buyers in the market at one time than at another? The demand for foreign bills is a demand for means of remittance to foreign countries. Other vehicles for the transfer of capital are also procurable, but none so suitable. Gold, or silver, or securities, would serve the same purpose, but their use is impeded by the cost of carriage and insurance, as well as by other drawbacks, and common-sense tells us that the least troublesome, and least expensive mode of sending money abroad is to buy and remit a bill of exchange.

Such being the reason why bills are sought after, it follows that the greater the stream of outward-flowing capital, the stronger will be the demand for bills, and the higher their price. On the other hand, if the inflow of capital exceeds the outflow, the price of London bills will be high abroad, and the price of foreign bills low in London. The position of the exchange is therefore an "outward and visible sign" of the relative strength of two

opposing streams of capital, which are incessantly flowing to and from the countries concerned, and it is necessarily *always in favour of the country that is receiving money on balance.* Thus, if the exchange on Germany is against us—or below par—or in favour of Germany—that fact is an indisputable proof that we are sending more money to Germany than Germany is sending to us; if in our favour, or above par, it proves the contrary.

Why people should wish to make remittances to other countries admits of course of various explanations, but the most natural reason—the reason that first presents itself to the mind,—is that of settling a debt; and it is accordingly usual to assign the place of honour as a regulator of the exchanges to international indebtedness. This, it need hardly be said, arises principally out of trade. The bulk of the bills drawn by one nation on another are created in connection with business-transactions, and if we could analyse the contents of a banker's portfolio we should be pretty sure to find that the trade-bills preponderated in numbers, if not in amount. Likely enough they would include most of the smaller bills, and most of those for odd sums.

That the trade-demand for bills exercises great influence over their price there can be no question, but it is an influence of which there exists no certain criterion. The Board of Trade, it is true, publishes the declared values of our national imports and exports, and, as we must undoubtedly pay for the one, and be paid for the other, this information ought to be valuable as a basis of enquiry. It is obtained, however, in too loose a manner to be of much help, and to infer, because the Returns of a given month showed an increase in our imports from Germany, or a falling-off in exports, that the German exchange was about to turn against us would, to a practical man, seem an absurdity.

Even if the Board of Trade Returns were strictly accurate, they would still need to be accepted with many reservations. In the first place there is considerable diversity in the terms on which mercantile transactions are based. The practice of "dating forward" may have for effect that goods exported in January only fall to be paid for some months later. Other exports, again, are made "on consignment," and are paid for only as sales are effected.

Secondly, vast sums are drawn on London for goods which never touch our shores at all. As bills on London are in universal demand, and as the names and standing of the great London accepting-bankers are universally known, a bill on London will, as a rule, command a higher proportionate price than one drawn on a Continental banker, and if an importer in Germany orders coffee from Rio, or cotton from New Orleans, he will, almost as a matter of course, and because it pays him better to do so, open a "reimbursement credit," in favour of the shipper, with a London banker. The consequence will be that, though the produce figures neither in our imports or exports, London will pay the exporting country for it, and Germany will pay London, so that the Brazilian or American exchanges will, to that extent, be influenced against us, and the German for us.

Then again, the interest due to us on the hundreds of millions that we have lent to other countries must be taken into account as a set-off in part payment of the commodities they send us; and we have, moreover, a heavy bill against them for services rendered in carrying their wares across the seas.

Lastly, the Board of Trade necessarily ignores the transactions in foreign securities. Poor countries are constantly borrowing from their richer neighbours. The Argentine Republic, for instance, exports Cedulas, as well as wool

and frozen mutton, and if we choose to buy them we must pay for them. Year after year many millions of English money find their way to every quarter of the globe, for investment in railways, mines, public-works, big guns, &c., and every new issue helps to sway the exchanges.

On the whole, therefore, we are forced to the conclusion that, owing to the many elements of uncertainty, and to the lack of information on essential points, the balance of actual indebtedness between this and other countries must remain an unknown quantity, and that, as we cannot correctly estimate its cause, neither can we hope to predict its effect.

II.

Though the relative strength of the London demand for bills on other countries to pay for purchases of produce and securities, as compared with the demand in those countries for bills on London to pay us for our manufactures, for interest, and for freight, &c., is the natural and original cause of variations in the course of the respective exchanges, there are cases in which the influence of relative indebtedness is dwarfed and even neutralized by another circumstance, which, so far as European countries are concerned, frequently plays the leading part in regulating rates. It is, in fact, almost possible to classify the exchanges on the basis of the influences by which they are mainly governed; and, if an attempt were made to carry out this arrangement, we should have them fall into three groups, somewhat as follows:—

Exchange on		Governed by
France.		The relative value of money, modified by relative indebtedness.
Germany.		
Holland.	Gold exchanges.	
Belgium.		
Switzerland.		
Denmark.		
Norway.		
Sweden.	Gold exchanges.	Relative indebtedness.
United States.		
Italy.		
Austria.		
Spain.		
Portugal.		
Russia.	Silver and paper exchanges.	Changes in the gold value of the currency - medium, and relative indebtedness.
Greece.		
India.		
Brazil.		
Argentine Republic, &c., &c.)		

It will be seen that the principal European exchanges—those of the countries with which we have the most extensive relations, and with which we are most in touch—form a group by themselves, and are characterised by the fact that their variations are dependent not so much on relative indebtedness as on the relative value of money. This being a new factor in the problem will require some preliminary explanation.

In the wealthier countries of Europe, where banking and credit are highly developed, and where the accumulation of savings constantly tends to outgrow the approved modes of investment, one of the distinctive functions of a banker is to take charge of his customers' spare money until they can find a profitable use for it: and the first principle of his business, or, rather, of this branch of it, is to keep the bulk of such money in a readily available shape. The resources must never be far out of reach. Convertibility

into cash, without difficulty, without loss, and without delay, is the essential qualification of a suitable outlet for his funds, and to lock up in mortgages, ground-rents, produce-warrants and the like, money that might have to be repaid at short warning would be to imperil his safety and almost to invite disaster.

In the whole range of interest-bearing securities there is but one class, however, that can be held to possess this qualification in all points, and that is bills of exchange, which, if carefully selected, are as safe as any other investment, and are endowed, moreover, with the excellent property of turning themselves into cash automatically, and at par. A banker who has plenty of good bills to depend upon can speedily gather together a large store of ready money in time of danger, by simply letting his portfolio run down without renewal. Accordingly, they are in general favour as a banker's investment, and in most cases form the backbone of the assets. This is true not only of bankers in these islands, but of those on the Continent as well, though with this difference, that, whereas the British banker confines himself solely to London paper, his neighbour on the other side of the Channel stocks his bill-case with an assortment of foreign, in addition to home acceptances.

Foreign bills as an investment are strangely neglected by English bankers. Whether it be that the technicalities that have to be mastered in connection with the business are the deterrent, or whether it be that insular prejudice regards them as unsafe, it is hard to say; but there is certainly good reason to doubt whether any banker in Great Britain, outside London, keeps a single Continental acceptance in his bill-case; and even in London such stock as is kept is mostly, if not entirely, in the hands of the "foreign bankers."

On the Continent the case is very different. Not only in the Capitals, but in all the principal towns, bankers buy and hold bills on other countries, both for the sake of the interest they yield, and as part of their regular stock-in-trade, and; other things being equal, naturally lay out most money in those which, for the time being, produce the highest return. The consequences are of the utmost importance, for if interest in this country rises above the Continental level, bankers and money-dealers in Franco, Germany, Belgium, Holland, &c., will at once begin to reduce their holding of home and other bills, by selling them, or allowing them to run off, and will replace them by London paper, producing a demand that may amount in the aggregate to many millions, and which almost invariably carries the exchange with it. In a like manner, if interest here falls below that level the exchange will recede as rapidly as it rose, because bankers abroad will get rid of their London bills in order to buy something more remunerative.

It will perhaps help to render this investment-demand more intelligible if, at this point, we make ourselves acquainted with the exact manner in which interest is earned on a foreign bill, and also notice how the movements of the exchange affect the yield. Taking the quotations of the Paris exchange for 1888 (see diagram No. 14) let us assume that on the 1st March, when Bank-rate in Paris stood at $2\frac{1}{2}$ per cent., and market-rate at $2\frac{1}{4}$ per cent., and when the exchange was at 25.46 $\frac{1}{2}$ long and 25.80 sight, you had laid out £1000 in a three months' bill on Paris for

£1000 at 25.46 $\frac{1}{2}$ =Fcs. 25462.50, due 1st June,

and had sold on the 31st May at sight-rate, which

happens to have been again 25.80, as before. For your £1000 you would receive back

$$\text{Fcs. } 25462.50 \text{ à } 25.30 = \text{£}1006 8\text{s. } 5\text{d.};$$

which is equal (leaving stamps, &c., out of consideration), to a little over $2\frac{1}{2}$ per cent. per annum, and is the exact return that was in prospect when the operation was initiated.

Now suppose the purchase to have taken place on
 5th Jan. Paris bank-rate 3 %; Long exchange 25.53 $\frac{1}{4}$;
 „ market-rate 2 $\frac{3}{8}$ %; Sight „ 25.53 $\frac{1}{4}$;
 £1000 à 25.53 $\frac{1}{4}$ =Fcs. 25537.50, per 5th April,

and the sale at the beginning of April

$$\begin{aligned} \text{Long exchange } & 25.42\frac{1}{2}; \text{ Sight exchange } 25.26\frac{1}{4}; \\ \text{Fcs. } 25537.50 \text{ à } 25.26\frac{1}{4} & = \text{£}1010 17\text{s. } 9\text{d.} \end{aligned}$$

In this case the exchange fell, so that, beside the twenty centimes per pound received for interest, there was a gain of $7\frac{1}{2}$ centimes on the rate, making a total yield of $27\frac{1}{2}$ centimes for each pound invested, or over $4\frac{1}{4}$ per cent. p.a.

Finally, transfer the bargain to

28th June. Paris bank-rate 2 $\frac{1}{2}$ %; Long exchange 25.46 $\frac{1}{4}$;
 „ market-rate 2 $\frac{3}{8}$ %; Sight „ 25.27 $\frac{1}{2}$;
 £1000 à 25.46 $\frac{1}{4}$ =Fcs. 25462.50, per 28th Sept.;

and the sale to

27th Sept. Long exchange 25.66 $\frac{1}{4}$; Sight exchange 25.48 $\frac{1}{4}$;
 Fcs. 25462.50 à 25.48 $\frac{1}{4}$ =£1000 19s. 8d.

Here a rise of the exchange from 25.27 $\frac{1}{2}$ to 25.48 $\frac{1}{4}$ swallowed up 16 $\frac{1}{4}$ centimes out of the 18 $\frac{1}{4}$ receivable for interest, leaving a net return of 2 $\frac{1}{4}$ centimes per £1, which is under $\frac{1}{2}$ per cent. p.a.

These instances are sufficient to explain that, in order to earn interest by way of an investment in foreign bills, three months' paper is bought at the long or cheaper price, and sold when due at the short or dearer price (if sold before maturity the price is proportionate), the margin between the two rates giving the return on each pound invested. They make it clear, too, that until the resale has been effected, the outturn of the investment is never certain; for, though the difference between short and long at the time of the purchase is the presumptive yield, the actual yield will of course be the difference between the long rate at the time of purchase, and the short rate at the time of the sale. There is thus a savour of speculation about the business, which may partly account for the disesteem in which foreign bills are held by English bankers, though on the other side of the question it may be noted that they are usually only bought for investment when the presumptive yield is greater than the discount obtainable on home bills, that they can be turned into cash whenever desired, and that the fluctuations range within comparatively narrow limits, besides having a constant tendency to right themselves.

The Continental buying of London paper for the portfolio, though it may be said to commence as soon as the interest obtainable thereon shows a profit over home rates, does not manifest itself in its full strength until the discount ruling here for the best bank-bills exceeds the market price of corresponding paper ("haute banque") abroad. The great banks of Paris, Berlin, &c., want first-class paper, and are willing to pay the first-class price. Quality is preferred to quantity; and they would rather buy a single bill for £10,000 on an A1 house, at a price to return three per cent., than load up their bill-case with 100 trade-bills of £100 each at four per cent. Hence the real in-

vestment-demand—the demand for sums large enough to sway the course of the exchange—is governed by the London market-rate for best bank-paper: and, in proportion as this rises above the corresponding rate abroad, so buying increases and the exchange advances. Finally, even, if the attraction of capital is sustained by the continuance of a high discount-charge, exchange may be forced up to specie-point, and gold will then begin to flow in.

In detail, the rise of the exchange under such circumstances is occasioned as much by sales on the Royal Exchange of Continental drafts as by the purchase of London on the foreign bourses, for, as the supply of choice bank-bills on this country is limited abroad, the buyers in Paris, &c., take the natural course of satisfying their requirements in the best-stocked market, and, to that end, instruct their London Agents to buy for them from the discount-brokers here, and to draw for the amount of their purchases. The offer of these drafts for sale here has, of course, the same effect on the exchange as would be produced by the demand for an equal amount of London bills in Paris: that is to say, while London is growing dearer in Paris, Paris is growing cheaper in London, the movements on each side being practically simultaneous and identical. It is hardly necessary to mention that the London price of Paris never sensibly differs from the Paris price of London, and that—the two sides being kept in constant touch by telegraph—it is immaterial which leads, as the other will at once follow suit. If this were not so, an easy profit could be made by taking advantage of the difference.

Thus, supposing Paris quoted London at 25.28, and London, Paris at 25.20, an operator would instantly sell London in Paris (by telegraphing his correspondent to draw upon him) and Paris in London, the result of the

transaction being that for his own draft of say Fcs. 25,200 he would receive £1000 here, and be charged Fcs. 25,200 in Paris, and for his agent's draft of say £1000 would pay £1000 here, and be credited with Fcs. 25,230 in Paris, thus coming off with Fcs. 30 to the good. As, in such a case, the sales of London in Paris would tend to depress the quotation there, while the sales of Paris in London would tend to raise it here, it is clear that the difference would be speedily levelled by the action of these so-called "arbitrage" operations.

III.

In illustration of the economic law that high interest attracts capital from abroad, and as evidence of the influence thereby brought to bear on the course of the exchange, a comparison is instituted in the accompanying diagram between the Paris cheque-rate during the same periods (eighteen weeks, beginning July) of 1886, 1887, and 1888, and the relative position of discount in the two capitals.

These figures, besides demonstrating—as they obviously do—the rapidity and certainty with which a stream of capital is set flowing towards the country that bids the better price for its use, also enable us to gauge the condition of relative indebtedness in the periods under review. In 1886, for instance, there are good grounds for assuming that the trade-transactions between the two countries almost approached parity, for when money was quoted at about the same price in both, and had consequently ceased to affect the rate either way, we find the exchange near par. Its subsequent advance was doubtless mainly due to the increase in the loan-value of capital shown to have taken place in London.

In 1887, on the other hand, it is clear that France was largely indebted to England. Discount during the whole of July having averaged about one per cent. higher in Paris than in London

(London market-rate	... ... ... ... ...	$1\frac{3}{8}\%$
3 mos. bills on Paris	25.41 $\frac{1}{4}$	
less stamp	... $1\frac{1}{4}$	
	—————	25.40
Cheques on Paris	... ... ...	$25.22\frac{1}{2}$
	—————	
difference	... ... ... ...	$17\frac{1}{2}$ c.
equal to	... ... ... ... ...	$2\frac{4}{5}\%$.)

bills on France would be in demand here for investment, and the exchange should have favoured sellers; but the fact that it remained at par is proof that the buying on this side was counteracted by a demand over there for London drafts to pay for purchases of merchandise and securities. In proportion, however, as money gained in value here the enquiry for Paris paper slackened, and the equilibrium was lost. Accordingly, the exchange rose; and, on the turn of the scale in August, when relative indebtedness had it all its own way, the rate already registered about ten points in our favour.

But the upward movement in money still continued here, and, as a consequence, the demand of French merchants and stock-dealers for bills to remit was soon reinforced by another on the part of bankers for bills to keep, the result being to force the exchange up to 25.42—a rise of twenty centimes in eight weeks. Two or three weeks later the margin began to contract again, and, by the end of October had all but disappeared; but the rate only fell back to 25.33, or eleven points for us, showing that France was still left with a heavy balance to settle.

A similar state of affairs prevailed in 1888. This year was marked by an extravagant speculation for the rise in France. International securities, copper-mine shares, &c., were heavily bought both by the public and by speculators, and, in order to keep up the supply, dealers took large blocks of stock off the London market, inclining the balance of indebtedness greatly in our favour. Consequently, when an investment-demand for London paper came to be superimposed on the already heavy remittance-demand, the effect of the two combined was so great as to carry the exchange up to 25.44, the highest rate known for years.

To invite the temporary loan of foreign floating-capital by bidding high for its use is of little avail, unless its owners can feel assured of employing their money with safety as well as with profit, and to ensure the success of the operation it is no less essential to offer absolute security than to offer remunerative interest. It is, in fact, only because English credit ranks as it does that an advance in discount rates operates so effectually on the exchange, and though it requires a stretch of imagination to suppose that the best class of London bills could under any circumstances fall into discredit, it is nevertheless quite within the range of possibility that a shock to confidence, such as a great failure is liable to occasion, might, by rendering foreign capitalists chary for the time being of trusting us with their spare funds, rob a high Bank-rate of all magnetic virtue.* The Bank, as we know, depends for the replenishment of a falling Reserve on its ability to attract gold from abroad, but high rates have failed to influence the exchanges before when general credit was bad, and they might fail again.

Quite apart, too, from the question of credit, it is to be observed that the extent to which the exchanges may be

* This was conclusively proved in 1866, when, in spite of a 10 p. c. bank-rate, the Paris exchange remained for three months against London.

affected by a given margin in discount-rates is not reducible to rules, but varies in each case according to the surrounding circumstances. There exists no necessary relation, no definite ratio, between the two sets of fluctuations. If the London market-quotation gains say one per cent. on that ruling in Paris, the exchange is pretty sure to exhibit some sign of the consequent investment-demand; but what the actual rise will be no one can foretell. It may be ten points, or it may be only two points; for other influences are always at work, which may either hasten or retard the upward movement. The investment-buying itself is also not of uniform strength, but will be greater or less according to the condition of the Continental markets, and to the opportunities that offer for the advantageous use of spare money at home.

IV.

To sum up the result of our investigation into the influences that control the course of the chief European exchanges, we find that the amount of their deviation from par is a measure of the strength, either united or counter-active, of two distinct forces—relative indebtedness, and the relative value of money; and that the latter, unlike the former, is the outcome of conditions that are known, and that are susceptible of artificial regulation.

Why an advance of the official minimum should be regarded as a means to the attraction of gold is now apparent. It is argued that if Bank-rate goes up the market will follow, or can be made to follow; that if the market-rate for best three months' bills rises above the corresponding charge in Paris and Berlin, &c., Continental capitalists will probably invest much of their floating funds in London paper; and that, if the supply of remittances on this country can thereby be so largely reduced as to

come short of the effective demand, some part of the balance due to us may have to be sent in gold. It is assumed, in short, that the Bank of England, by acting on the relative value of money, will be able to turn the exchanges in our favour, and, ultimately, to force them up to specie-point.

In the working-out of this process little difficulty is experienced until the final stage is reached. So long as credit is good here, high interest almost invariably leads to a rise of the exchanges, but it is noticeable that, when on the very verge of gold-point, the upward movement almost as invariably receives a check. This is explainable to some extent by the existence, in addition to bills of exchange and the precious metals, of a third means of remittance, consisting of the so-called "international" securities. Certain bonds of the Italian, Egyptian, Russian, Argentine, and other governments being quoted and dealt in on the principal foreign bourses, as well as on the London Stock Exchange, can be bought in one country, and sold in another, at practically equivalent prices, and are hence available in case of need as a medium for the transmission of capital; but as the operation involves the expense of insurance and brokerages, as well as loss of the margin between buying and selling prices, it can only be resorted to with advantage when bills are exceptionally dear, and, in the matter of expense, there is probably little to choose between a shipment of bullion and a shipment of securities. When, however, an advance of the exchange is suddenly arrested just below gold-point, it is presumptive evidence that the "arbitrage" of bonds is beginning to yield a profit.

Another reason is that a high exchange invites speculation for the fall. When cheques on Germany, let us say, stand as high as 20.50 (long being 20.50 plus interest),

there is plenty of room for a fall, but very little for an advance, and a speculative purchase of bills may be thought to offer good prospects of profit on the eventual re-sale. If so, a demand for German paper is likely to spring up in London, which will go towards neutralizing the effect of the demand for London paper in Germany.

In spite, however, of all counteractive agencies, experience proves that, in the long run, a high Bank-rate never fails to draw gold hither from one point or another. There may be protracted delay, but it is sure to come at last.

Now, as an increase of the Reserve must, sooner or later, be followed by a reduction of the official minimum, it is very natural that the bill-brokers and discount-houses should bestow great attention on the signs of an inflow, and that, when specie-point is close at hand, the further movements of the exchange should be reflected in the fluctuations of the market-rate. If the exchange continues to gain, discount we find weakens, because dealers, in their anxiety to secure as many bills as possible before the anticipated fall, begin to outbid each other; if it relapses, discount hardens, because it is feared that the Bank may be forced to give the screw another turn. So intimate, sometimes, is this connection that it is difficult to distinguish between effect and counter-effect, or to say whether the exchange controls discount, or discount the exchange.

Immediately it becomes known that gold has actually arrived, the market-quotation gives way,—the fall being greater or less in proportion to the quantity of money seeking employment, and to the magnitude of the receipts,—and the exchanges follow; for as London bills now yield a lower return than before, the Continental investment-demand ceases, and the price declines for want of support. The fall is hastened also by sales on the part of those who, having bought on the basis of the higher discount charge,

take advantage of the relapse to realize at a profit. Thus, if discount here is at four per cent., and Berlin quotes London 20.50 cheque^a and 20.30 for three months (leaving stamps, &c., out of consideration), it is evident that a drop to three per cent. must reduce the margin between short and long by five points to 20.50-20.35, so that those who had previously bought long at 20.30 could in theory gain about a quarter per cent., either by reselling at 20.35, or by the more usual course of remitting the bill to London for discount and drawing thereagainst. The competition of sellers would, however, force them to share this profit with buyers, or, in other words, to accept a lower price—say, 20.47½-20.32½; and if discount, while going down here, were in Berlin going up, they might perhaps be willing to relinquish the whole of the profit, making the rate 20.45-20.30; while, finally, if money were now worth more at home than here, they might even sell at a loss.

A fall of the German rate that occurred in October, 1888, will illustrate the foregoing explanation:—

Date.	Gold movements during week	Bank Rate	London Market rate.	Berlin Market rate.	8 days London in Berlin.	3 mos. London in Berlin
1888. 3rd Oct..	£339,000 out ..	Raised to 5%	4½%	3½%	20.48½	20.25½
10th "	764,000 in ..	"	3½,,	3½,,	20.45½	20.26
17th "	393,000 ,,"	"	3½,,	3½,,	20.42½	20.24
24th "	22,000 ,,"	"	3 ,,"	3½,,	20.36½	20.22½

As the effect of an advance of Bank-rate to five per cent. the stock of bullion soon registered a large gain, and the market, believing danger to be over, competed so eagerly for bills, that within three weeks the rate had broken away to three per cent., although the official minimum remained unchanged. The German exchange, it will be seen, followed the downward course of the market, but it is noticeable that whereas a fall in discount from 4½ per cent. to

^a Berlin actually quotes 8-days London, not cheques, but a slight quotation is assumed for the sake of simplicity.

3½ per cent., when London was above Berlin, only brought the exchange down three points, a fall from 3½ per cent. to 3 per cent., when London was below Berlin, brought it down six points.

V.

Although the property of influencing discount-quotations has, for the sake of brevity, been ascribed to the "exchanges" in general, it is to be observed that only those rates affect the market, the rise or fall of which is attended by the possibility of an eventual gold-movement, and that this condition is fulfilled by very few. Gold, it is evident, can only be had from countries that have it to give, and are willing to give it. Unless they possess mines, it must be taken either from the circulation or from the central reserve: so that, in the case of a country that has no mines, that has little or no gold in circulation, and that refuses to trench on its central reserve for export purposes, specie-point is completely inoperative.

As an instance we may cite the exchange with Greece. The monetary system of Greece being in theory identical with that of France, the mint-par with England is 25.22, and the nominal specie-point may be taken at perhaps one per cent. higher: but as there is a forced currency of depreciated paper, and as the country, practically speaking, possesses no gold, we find the exchange as much as twenty per cent. above par. From Italy, too, at the present time, gold cannot be obtained. The Italian currency consists almost entirely of notes, which are redeemable in gold or silver on presentation, and though the National Bank might pay out small sums in gold, it would certainly refuse it if demanded to a large amount for export. In such cases as these the exchange is subject to very wide fluctuations, the value of paper money being at the mercy of the issuing government's political, as well as financial, troubles.

To come to the point, the exchanges that bring gold to the Bank of England are in practice reducible to three, namely: those of France, Germany, and the United States.^a These are all wealthy nations, are all holders of large stocks of metal, and are all able to bear a withdrawal of one or two millions without, as a rule, seriously feeling the loss. France, we may add, is to be understood as including Belgium and Switzerland, the rates of which, though nearly always more in our favour than the Paris quotation, never differ by more than the cost of sending specie across the frontier. The Dutch and Scandinavian exchanges are also omitted, because they are prevented from attaining specie-point by the arbitrage operations of Berlin bankers, and are therefore to a great extent subordinate to the German rate. Supplies also reach us from Australia and South Africa, but these imports stand on a different footing. Being a gold-producing country,^b Australia ships the produce of her mines as an article of merchandise, and in payment of goods received, just as she sends copper.

Turning to the other side of the question, that of exports, we again find that France, Germany, and America take the lead. Sometimes they are in our debt, and we take gold; and sometimes we are in theirs, and have to give it. The rest of the world, however, buys and borrows so largely from us, that there is rarely any question of the exchanges being against London. Under exceptional circumstances, such as the issue of a new loan, they may on occasions swing round to gold-point, but their normal condition is favourable. How, then, it may be asked, are the numerous withdrawals from the Bank of England for various destinations to be accounted for? The ex-

^a France and the United States possess the double standard, silver being an unlimited legal tender equally with gold, but the latter alone is the metal in which values are measured, and practically both are gold standard countries.

^b The United States also is a large producer of gold, having in the past twenty years (1871-90) raised over £7,000,000 per annum.

planation is simple. Many withdrawals are not exchange-operations at all, but are shipments "to order." This or that foreign government happening, let us suppose, to be in want of gold for some purpose or another—probably as a basis for further issues of paper—instructs its banker to buy a certain quantity as cheaply as possible, and to debit it with the cost; and as London is the most accessible of the gold-markets, the banker sends on the order to his agent here, who executes it by taking bars from the Bank. A transaction of this nature is clearly not dependent upon the state of the exchange. A good exchange may help it, for if the rate is favourable to the foreign government so much the better; but a bad one cannot hinder, for whether favourable or not the bullion will be taken if there is actual need of it.

The Bank's losses of gold, therefore, cannot all be put down to the working of the exchanges; but, on the other hand, neither can all its gains. Large imports are occasionally made in connection with the financing of foreign loans. It is almost essential to the success of such operations that money should be plentiful and cheap, and, though the big finance houses, who undertake to carry them through, cannot increase the quantity of loanable capital, they can do much to make and keep the market easy by bringing gold here, as required, to maintain the Reserve. Consequently it is no unusual occurrence for the announcement of a conversion or of a group of new issues to be accompanied by an artificial inflow of bullion, which is intended to smooth the way.

Notwithstanding the possibility of these casual interferences, the ebb and flow of gold is determined in the main by the action of the exchanges, and we now proceed to an examination in detail of the three principal rates:—those of Paris, Berlin, and New York.

CHAPTER X.

THE FOREIGN EXCHANGES (CONTINUED).

I.

PARIS.

The mint-par of exchange between England and France is $25.22\frac{3}{4}$, but for convenience is commonly called $25.22\frac{1}{4}$.

To transmit bullion from London to Paris costs about 10 centimes per £, and the outgoing Specie Point lies between 25.10 and 25.15. At the higher of these rates there is said to be a profit on buying light French gold from the Bank by weight, and setting it in circulation in France, and at the lower it would probably pay to export sovereigns. The result of such operations, it has already been pointed out, is determined by the charges that have to be borne, and, as these vary according to the position of the exporter, and the magnitude of the operation, only approximate figures can be given.

Incoming Specie-Point, or the exchange at which we ought to draw gold from France, is nominally about $25.32\frac{1}{2}$; but as the rate sometimes stands above this figure for weeks together (see diagram No. 14), it would appear that there exists some obstacle to the outflow. Such is in fact the case, and the obstruction is a premium on gold, imposed by the Bank of France.

Unlike the Bank of England, which is a private corporation, existing solely for the benefit of its stockholders, the Bank of France is regarded as a semi-independent department of the State, and as such is expected to adapt its policy to the views of the Government, as well as to private ends. In endeavouring to hinder an export of the precious metal

it fulfils a public function. The contingency of war, be it remembered, is never for a moment absent from the minds of those who have the direction of Continental finances, and the fifty millions or so of gold lying in the vaults of the Bank are looked upon as the national war-treasure, to part with which for mere trade-considerations would be want of patriotism.

Then again, while the metallic reserve of the Bank of England consists almost exclusively of gold, that of its neighbour is about half silver. The stock of metal held by the Bank of France amounted, at the beginning of 1880 to £29.3 millions gold, and £19.2 millions Silver ;
 1885 " 40.1 " 41.1 " "
 1890 " 50.5 " 49.7 " "

The value of the silver is fixed by law at a price equivalent to 60*4*d. per ounce, or upwards of 50 per cent. above the present (April, 1892) market quotation ; and, as most of this unwieldy mass of the depreciated metal was acquired prior to the great fall in price, the loss to France, if the necessity ever arose of using its silver to make payments abroad, would be enormous. Remote as the contingency may appear, it helps to account for the Bank's unwillingness to lose gold.* It also happens, too, that the balance of indebtedness between England and France is usually in our favour, and there can be little doubt that, if the Bank had always been ready to accede to demands for export, the result would have been to absorb much of her stock, and to fill its place with the cheaper substitute.

For these reasons the Bank of France has almost invariably shown herself disinclined to let gold leave the country.

When Napoleons are asked for against Notes the request is treated according to circumstances. If the exchanges

* The possibility has also to be taken into account that an undue increase in the proportion of silver to gold might cause the note to become depreciated.

are favourable, and the gold is wanted by a customer for trade-purposes within the country, it will be given out as a matter of course to any reasonable amount; though, even in this case, it is said that the applicant is expected to pay for the gold by discounting first-class bills at Bank-rate, by which means the Bank is enabled to make an indirect profit on its coin, as the paper would otherwise have gone into the market. If, however, the exchanges are against the country, the Bank protects itself by paying out small coin, which, like our own half-sovereigns, is so worn as to be useless for export, and eventually can exercise its right to pay in 5-franc silver pieces, which, under the monetary system of the country, are legal tender to any amount.

Applications for large withdrawals avowedly for export must be submitted to the Bank directors, who fix the premium at which they are willing to sell bars and foreign coin. This premium varies with the intensity of the demand, and has been as high as 9 per mille. In most cases it is prohibitive, and is meant to be understood as a refusal.

As soon as a premium comes into operation, the nominal specie-point is superseded, and must be modified in conformity. At 4 per mille, for instance, the exchange would have to advance to 25.42½ before it would pay to take gold from the Bank.

Now, if the only means of obtaining gold from France were by the encashment of notes, as is the case with us, a persistent refusal to let it go, when the balance of indebtedness was adverse, would amount to much the same thing as retrogression to the silver standard, and the exchange would rise in proportion.

Why this does not occur in practice is because gold can always be extracted from the circulation. The banking-system of the United Kingdom is so elaborate, and credit on the whole so good, that our currency consists mainly of

cheques ; but in France the cheque-system is almost unknown, and trade is carried on entirely on a gold basis. The bankers of Paris, and other large cities, issue cheques, but they are looked upon in much the same light as we in London regard a "bank-transfer." Payments are everywhere effected in gold or notes, and of the two the former is preferred, as notes have more than once engaged the attention of forgers. The quantity of gold coin in use is consequently very large, and, though estimates differ widely as to the actual amount, it is no doubt much larger than the circulation of this country,^a and there is no difficulty in collecting a considerable sum for export. Specie-point being 25.32½, it follows that, if the price of cheques on London rises higher, it will come cheaper to remit full-weight Napoleons than to buy and remit a sight-draft. What happens then in such a case is that full-weight coins are sorted out and sent away ; at a step or two higher the heavy coins follow, and lastly, if the exchange goes a point or two beyond 25.40, ordinary coin, taken as it comes, will yield a profit.

The business of collecting Napoleons is taken in hand by the money-changers, who buy the coin from railway-companies, hotel-proprietors, shop-keepers, &c., and sell it in large parcels to the exporting houses. The system adopted is to buy by weight at the mint price of 3100 francs per kilogramme, and to give in addition a small premium. If the exchange is at 25.40, for instance, they may perhaps offer 2 per mille, which means that they are paying at the rate of Fcs. 3106.20 per kilogramme. The heavier the coin, of course, the better for the seller, who has to lose the difference between the legal and the actual weight ; and, as a natural result, the coinage is picked

^a The latest estimates are : for the United Kingdom, £69,000,000 (Messrs. Martin and Palgrave; Dec., 1891); for France, £160,000,000 (M. de Foville, in *Economiste Français*; Sept., 1891).

over, or garbled, the good coins being sent abroad, and the light ones retained for home use.

Under these circumstances the effective limits to the range of the French exchange may be laid down as, on the one side, 25.10, and, on the other, such point beyond 25.32½ as may be determined by the average loss of weight on the best coin available, together with the cost of collection. Between 1883 and 1888 the lowest rate recorded was 25.11½, and the highest 25.44½.

The policy of restricting withdrawals by means of a premium appears at best to be of very doubtful wisdom. In the first place it can never actually prevent gold from leaving the country; for if there is a balance owing to us from France, and we refuse to accept payment in kind or in securities, no other medium of liquidation remains but gold, and a premium will but serve to dam up the outflow until the exchange reaches a higher level. Secondly, it inflicts a fine on those who have to remit to England; for, if 25.32½ were the effective specie-point, it would also be the limit to the price of cheques, while, as it is, a merchant may be compelled to pay a quarter per cent. or so more for his remittance than would otherwise be the case. Lastly, it is open to question whether in the end it really prevents diminution of the Bank's stock, which is its only justification. When an export is in progress the customers of the Bank of France can hardly expect to be freely paid in gold, but, as soon as the drain is over, they see no reason for not asking for what they want, and would be much incensed if their legitimate requirements were refused; consequently, if the export has caused any deficiency to be felt in the circulation, the vacuum is gradually filled up at the Bank's expense.

The question inevitably suggests itself why the Bank of France should not copy the example of its neighbours, and

try the effect of an increased discount-rate. Apparently the reason is that the French have a liking for cheap money, which they believe to be good for trade, and that the Bank yields to the pressure of public opinion. For the five years ending February, 1888, the rate was maintained without change at 3 per cent., and though under extreme pressure it was put up in the autumn of that year, to counteract the effect of a 5 per cent. rate in London, the case was quite exceptional, and the normal charge (which is still in force, April, 1892), was restored as soon as possible.

II.

BERLIN.

Turning to Germany, we find a system in operation which is nearly on all fours with our own. Not only do both countries enjoy the luxury of a gold standard,* and both State Banks pay out gold to any amount on presentation of their notes, but both also adopt the same plan of correcting adverse exchanges by a prompt advance of the official discount-charge, and frequently raise or lower their rates almost simultaneously.

According to German mint-law 500 grammes pure gold are to be converted into $69\frac{3}{4}$ twenty-mark pieces, $\frac{9}{10}$ ths fine, and the currency-par with the United Kingdom is therefore about 20.43, as follows:—

$$\text{Rm } ? = \text{£}1$$

$$\text{If £ } \dots \dots \text{ 1869} = 480 \text{ oz. Troy Standard Gold}$$

$$\text{,, Ozs. Standard } 12 = 11 \text{ oz. Fine Gold}$$

$$\text{,, Oz. Troy } \dots \quad 1 = 31.1035 \text{ grammes}$$

$$\text{,, Grammes } \dots \quad 500 = 1395 \text{ Reichsmark}$$

$$= 20.429$$

The Specie-Points are 20.38 against us, and 20.53 for

* The old silver thaler is still legal tender in Germany, but to all intents and purposes the country is in full possession of a gold standard.

us. The latter is the rate at which the Bank of England gains gold at the expense of the Reichsbank, and is always effective. Though the Reichsbank is for several reasons very loath to see its reserve of metal drawn upon for the benefit of other countries, it has in no instance ever refused to pay out full-weighted gold at the head-office in Berlin; nor, of course, has it the power to refuse. At the same time, there is a general impression that, while always saying "Yes," it usually means "No"; and it is said to have occasionally visited its resentment upon exporters, who have had the temerity to ask for gold at inconvenient seasons. Whatever the nature of the pressure may be that the Reichsbank is able to exert on the Berlin bankers, it appears to be effectual in hindering them from acting counter to its wishes.

To illustrate how Specie-Points are arrived at we give a pro-forma account of a shipment of gold from London to Hamburg:—

CONT IN LONDON.

6500 ozs. Russian Imperial at 77/10½ per oz.	£25309	7	6
Boxes, bags, packing, entry-dues, and shipping-charges	2	6	6
Freight	15	16	3
Brokerage	6	6	6
Insurance	11	13	3
Commission	12	13	6
		51	16
			0
	£25361	3	6

PROCEEDS IN HAMBURG.

6500 ozs. at 31.1035 grammes per oz. = Kg. 202.1727, sold to the Reichsbank at the fixed tariff- price of M 2551.536 per Kilogramme	M 515851
Cartage, &c.	26
	515825
Allow for loss of interest, say, five days at 3 per cent.	212
	M 515613

$$\text{M } 515610 \div \text{ £}25361 = 20.33.$$

The policy pursued by the Reichsbank in the unceasing "struggle for gold" is far more enterprising than that of the Bank of England, and any legitimate expedient that will tend to smooth the way for imports is adopted without hesitation. Its assay of foreign coin, for instance, is more favourable to the seller than that of the Bank of England, and it is even willing to bear the small loss of interest that is incurred on a shipment from this country, having to that end offered to make advances for six days, free of interest, on condition of the loan being repaid in gold.

As might be expected, its efforts have been attended with a considerable measure of success, and the reserve of metal has increased from £25.9 millions at the end of 1884, to £45 millions at the end of 1891.

The amount of silver held by the Reichsbank is not published, but according to the latest information is thought not to exceed £10 millions.

CHAPTER XI.

THE FOREIGN EXCHANGES (CONTINUED).

I.

NEW YORK.

THE money-market of New York, to which we next direct our attention, is governed by conditions and forces that are in some respects unique, and which, in the question of their ultimate outcome, present the most interesting financial problem of the day.

There exists in the United States no central institution holding a commanding position similar to that occupied by the State Banks of Europe, but in certain "Central Reserve Cities," of which New York is the chief, the principal banks are banded into an "Association," and, as such, are required by law to keep a reserve of "lawful money" amounting to not less than one-fourth of their deposits, or, in default, to stop increasing certain of their liabilities until the proportion is restored. For every \$4 posted to a customer's credit the Associated Banks must provide and set apart \$1 in cash, and must moreover keep their reserve actually at home, and not elsewhere.

The strength of this reserve is the gauge of the market. So long as the amount of "Specie and Legal Tenders," held by the Associated Banks of New York, exhibits a sufficient margin over and above the twenty-five per cent. limit, the loan-value of money is settled by natural causes; but as soon as the percentage draws near its minimum, the Banks are compelled to contract their advances, and the rate rapidly rises.

In view of the fact that stringency of the New York market is a condition which favours, and is usually antecedent to, an export of gold from this side, it is of moment to know how a fall of the Reserve is usually brought about.

A drain is liable to be produced by one or both of two very different causes, namely: an outflow of currency to the interior, or an absorption of currency by the Treasury. New York, like London, is the focus of the home banking system. Owing to the facts that the law permits National Banks (the country-banks of America) to include in their reserves the balances kept at "Central Reserve Cities," and that money can generally be employed to better advantage in New York than elsewhere, the spare cash of the provinces gravitates towards the one central point, and the stock of ready money lying at the commercial metropolis is virtually the foundation upon which the transactions of the whole country are based. What result to expect we know from our own experience. Whenever and wherever the volume of exchanges increases to such an extent as to necessitate the use of a greater quantity of the instruments of exchange, the country bankers provide the additional currency by calling in their balances, and the whole strain is thrown on New York.

This is especially the case at harvest-time. The banks of the interior have then to supply the farmers and planters with cash to pay wages and to meet the heavy outlay necessary for transporting the crops to the seaboard: and, year after year, with the regularity of the coming and departure of the seasons, deposits are withdrawn from the Associated Banks at the approach of Autumn, and a tide of specie set flowing towards the cotton- and corn-fields of the South and West.

Such a movement, if unexpected, could not fail to entail serious consequences; but its regularity enables New York

to make ready for it in advance, and thus renders it almost harmless. Nevertheless it is always possible that the provision made may fall short of actual requirements, and in that case some way must be found of replenishing the dwindling reserve until the currency that has gone into circulation trickles back again. An easy means of doing so is at hand, however. Against the bills drawn on Europe in payment of the exports of produce, gold can if needful be ordered over. In the ordinary course, specie only crosses the Atlantic when other means of settlement are wanting; but, if the necessity be imperative, America will take the balance due to her in metal, and will draw it from the point—London, Paris, or Berlin—whence it can be had cheapest.

Coming at a time when the requirements of the home-harvest have to be met, an export-demand for the United States is a most unwelcome addition to the burdens of the European banks, and puts them all on the defensive—each striving to turn aside the drain, or to make up its loss, at the expense of its neighbours. The result is a war of rates, and that “fight for gold,” which has been happily compared to the situation of three men struggling to cover themselves with a blanket only big enough for two.

We know already that the price of money rules highest towards the fall of the year, and that primarily this is due to the scattering of currency which accompanies the ingathering of the harvest, but the more immediate stimulant is usually the autumnal export of gold to New York, which acting on reserves already attenuated, has the natural effect of forcing up rates.

The second cause of a drain on the Reserve, and the most salient characteristic of the New York market, is the incessant absorption of currency produced by the collection of the Government revenue. In England, France, and

most other countries, the proceeds of taxation are entrusted to the custody of a State bank, which employs the greater part of the money in loans and discounts, and thus at once returns it to the channels of trade; but in the United States, the Secretary of the Treasury—the State-official corresponding to our Chancellor of the Exchequer—acts as his own banker, and for safety's sake, keeps the Government balance under his own control in the Treasury vaults. This circumstance alone would make little difference to the market if the Secretary had power to set free his holdings after the ordinary banking fashion, but as he is forbidden by law to use Government funds for any purpose other than disbursements on account of the State, such surplus as may at any time remain in his hands is as dead to the market as the buried hoard of a miser. As all taxes, too, are payable in currency, the Treasury balance consists solely of notes and coin; so that an accumulation of Government funds not only diminishes the available supply of loanable capital, but, if allowed to go on unchecked, might speedily swallow up the marginal reserve of legal-tender which keeps the Associated Banks above the twenty-five per cent. limit, and thus bring about a dangerous crisis.

To foreend this catastrophe needs constant official care and watchfulness. The task incumbent on the Treasury is to preserve equilibrium between receipts and disbursements, so as to keep the outflow of currency equal to the inflow. But this is no easy matter. Even in England there are times when the one temporarily overlaps the other to a large amount, as is seen from the wide fluctuations in the "Public Deposits" at the Bank of England, and, if such is the case in a country where income is annually adjusted to balance expenditure, how great must be the difficulty of preventing a lock-up in the United States, where the public

income—and herein lies the crux of the problem—exceeds the outgoings by many millions sterling per annum.*

This surplus arises principally from protective Customs duties. The fiscal policy of the States is based, as is well known, on the doctrine of Protection to Native Industry, and consists in imposing the burden of taxation on the consumers of such foreign commodities as are capable of being produced at home. Heavy duties are levied on almost every article of import, nearly half the revenue being derived from the Customs. There has long been a general consensus of opinion that something must be done to bring income and expenditure more nearly to a balance—the large excess being an encouragement to waste and extravagance,—and that, in one shape or another, remission of taxation is the only effective and final remedy; but when the reduction or abolition of any particular tax is mooted, the party-passions of the two great political factions are at once aroused. The Democrats adopt what to outsiders appears the common-sense view that revenue should be contracted by a revision of the exorbitant Customs tariff. The Republicans, on the other hand, together with the whole body of protected manufacturers, are violently opposed to any measure tending in the direction of Free Trade, and put forward the counter-proposal to spend more money on the Army and Navy, and on Public Works, as well as to reduce the Excise duties. To this latter alternative again the general sentiment of the middle and upper classes is strongly averse, and inclines rather to place the drink-traffic under still greater disabilities than at present.

Meanwhile, and until some measure of relief can be devised that suits both parties, some outlet has to be found for the large weekly surplus.

* The recent re-arrangement of the tariff, combined with a more lavish expenditure, has greatly reduced the balance to the good, and for the fiscal year ended June 30, 1891, it amounted to the moderate figure of £7½ millions, compared with £20 millions for each of the two previous years.

Hitherto the Secretary of the Treasury has contrived to get rid of his superabundance by paying off the public debt through purchases in the open market of United States bonds at the price of the day; and this, practically speaking, is the only means open to him for the use of his money.* In proportion, however, as the volume of the outstanding debt contracts, so the operation increases in difficulty, for, knowing that the Secretary is forced to buy, and that they must gain by waiting, holders are in no hurry to realise, and it needs a constantly increasing premium to induce sales. The bulk of the remaining bonds, moreover, are held by National Banks as the basis of their note-issue, and are not likely to be surrendered except on compulsion. To all appearance, therefore, the existing system must sooner or later end in a deadlock; and, so long as it endures, business has to be carried on under conditions that are wholly artificial. The New York market is in fact at the mercy of an autocrat, who, having full power to loose or to bind large masses of currency at his absolute discretion, decides for himself whether and when money shall be cheap, and whether and when it shall be dear.

II.

In addition to the management of the national surplus, there also devolves on the Secretary of the Treasury another public duty of even higher importance, for on the wisdom and foresight displayed in the exercise of his office depends no less an issue than the maintenance of the standard of value on its present gold basis.

The currency system of the United States is of a multiform and singularly complex character. Besides gold and silver it comprises as many as six varieties of paper money, and consists of:—

* The Secretary is also allowed to deposit public money in the National Banks, but this method of disposing of it is now deemed "unwise and inexpedient," and is being gradually discontinued.

1. *Gold Coin.*

Gold is the standard by which all values are measured, the unit of value being the one-dollar gold piece, containing 25.8 grains gold, nine-tenths fine.

2. *Silver Coin.*

The standard silver dollar contains $412\frac{1}{2}$ grains silver, nine-tenths fine, and is full legal tender at its nominal value in all cases where payment in gold has not been expressly contracted for.

3. *Gold Certificates.*

These are issued by the Treasury against deposits of gold coin, and are expressly made redeemable in gold coin. They are mostly of large denominations (\$100 to \$10,000), and are found useful by bankers as substitutes for the coin which they represent.

4. *Silver Certificates.*

Issued by the Treasury against deposits of silver coin, and redeemable only in silver dollars. They are receivable for Customs Duties, Taxes, and all public dues, but are not otherwise legal tender. They are mostly of small denominations.

5. *National Bank Notes.*

Issued by the National Banks on the security of a deposit with the Treasury of United States Bonds, and redeemable on presentation in Government Notes or Coin.

6. *Government Notes or "Greenbacks."*

Issued by the Treasury and redeemable on presentation in coin. Their amount is limited by Statute to \$346,000,000, and they are secured by a special reserve in the Treasury of \$100,000,000 in gold. They are legal tender in all cases.

7. *Treasury Notes.*

Issued by the Treasury (under the Act of 14th

July, 1890) in payment of its purchases of silver bullion, and a legal tender in payment of all debts, public and private, except where otherwise expressly stipulated. They are mostly of small denominations (none may exceed \$1,000), and are redeemable in either gold or silver coin at the discretion of the Secretary, but the Government holds itself bound to redeem them in gold if required.

8. *Currency Certificates.*

Issued by the Treasury to bankers and others against deposits of Government and Treasury Notes, and, like the gold certificates, are found useful in cases where large sums have to be handled.

The weak point of the scheme is the legal-tender silver dollar, which owes its origin to the notorious "Bland" Bill, passed in February, 1878.

In view of the then-approaching resumption of specie-payments, which, after a suspension lasting since the Civil War, was to take effect at the beginning of the following year, the people of the United States had been called upon to decide what metallic system they would employ; and they elected, notwithstanding the discredit into which silver had fallen in Europe, to declare the depreciated metal an unlimited legal tender equally with gold, the latter alone being, it was maintained, too narrow a basis upon which to conduct their money affairs. But further, and what was of far greater import, the country also committed itself to a continuous coinage of silver, the bill enacting that (whatever price the metal might stand at, or whatever the prospects of the market might be) the Treasury should, every month, purchase not less than two, or more than four, million dollars' worth of silver bullion, and should cause the same to be coined into dollars of $412\frac{1}{2}$ grains each, nine-tenths fine.

A ratio was thus established between silver and gold of about 16 to 1:—

$$1 \$ = \left| \begin{array}{l} 412.5 \text{ grains silver, } \frac{9}{10} \text{ fine,} \\ \text{or} \\ 25.8 \text{ grains gold, } \frac{9}{10} \text{ fine;} \end{array} \right.$$

corresponding to a price for the former of 59 pence per ounce English standard; so that the lower the price of silver bullion in the market, the less is the intrinsic value of the silver dollar.* At $41\frac{1}{4}$ d. per oz., for instance, it is only worth 70 cents, or 2s. $10\frac{1}{2}$ d.

It is doubtful whether even the warmest advocates of the measure ever actually believed that a silver dollar was adapted to the requirements of the people, or that, without it, there would be, as they alleged, a deficiency of currency. Their real motive, more probably, was to benefit the large and powerful silver interest by providing the mine-owners, at the expense of the nation, with a ready market for their produce. Be that as it may, it is the fact that, even from the first, the proportion of Bland dollars that found their way into circulation was but small. Not only is silver far too heavy and cumbersome for the use of a wealthy nation, but the Americans, as is proved by experience, much prefer paper to coin. Whether wanted or not, however, the minimum coinage was bound to go on, and month after month seventy tons or so of dollars were minted, packed up, and stored away in the Treasury vaults, where they remain, and are for ever likely to remain. It is certain, in fact, that, but for the power which the Treasurer possessed of issuing paper thereagainst, the Bland dollar would years ago have had to be paid out forcibly. Fortunately, however, for the maintenance of the gold basis, he was able to

* Its value is easily calculated. It contains $371\frac{1}{4}$ grains fine silver, and is therefore worth $\frac{371\frac{1}{4}}{444}$ or almost exactly five-sixths of the price per ounce of standard silver in the London market.

mobilise the greater part of the accumulation in the shape of Silver Certificates, and thus to fill the void created in the currency by the gradual extinction of National Bank Notes, the issue of which, being based on U.S. bonds, contracts concurrently with the redemption of the public debt. In order that his certificates might find favour, the Treasurer also hit upon the plan of emitting them in small denominations for the use of the million, and of making room for them in the circulation by restricting the issue of greenbacks to notes of large amounts, and this expedient proved so successful that the Silver Certificate, though redeemable only in silver dollars, and though not strictly a legal tender between individuals, eventually came to be the note most commonly met with, and now passes from hand to hand unchallenged, side by side with the National Bank Note and the Greenback.

The rapidity with which the debasement of the currency was proceeding, and the magnitude of the additions made to it (at the end of June, 1891, the number of over-valued dollars minted under the Act of 1878 had attained the gigantic total of \$378,000,000) might, it may be thought, have satisfied the Silver Party; but such was not the case. The current output of the American mines being about 54,000,000 ounces per annum (very nearly one-half of the entire produce of the world), they succeeded by continual agitation in convincing the American people that if, instead of only a portion, the whole of this quantity could be taken off the market, the withdrawal would soon create a deficiency abroad, and this in turn bring about a sustained advance in price. Accordingly, in July, 1890, a new Silver Bill was passed, ordering the monthly purchase by the Government of 4,500,000 ounces of silver at the market value: but, as it was manifestly absurd to go on manufacturing dollars which nobody wanted, the metal purchased under the new

law was to be stored away in the shape of bullion. In payment of these purchases a new kind of full legal-tender paper money, called a Treasury Note, was ordered to be issued, which differs from the Silver Certificate in that, while redeemable in either gold or silver coin at the discretion of the Secretary of the Treasury, the Government has virtually staked its honour to pay it in gold or in a gold dollar's worth of silver. The Silver Certificate, on the other hand, only promises to pay a silver dollar, whether it be worth 100 cents or 50 cents, and though receivable for Government dues is not otherwise a legal tender.

So far, the interchangeability of gold and silver, which the power of the Government is now pledged to maintain, has been scrupulously upheld (more so even than is the case in France, for in no instance has any creditor of the State, or any holder of a Government note, ever been paid in silver against his will, nor has any premium ever been demanded on gold,) and it may continue to be so upheld so long as the Treasury can manage to retain a substantial balance of the former metal in its hands; for, beside the amount that must be held against Gold Certificates, and the \$100,000,000 that back up the Government Note, a large additional reserve of gold is kept up with a view to ensure the convertibility of the silver dollar.

It needs skilful management, however, to prevent this reserve from wasting away. The Silver Certificates that come in through the Customs have to be continually pushed out again, and the gold, as far as possible, kept in.

If the Mint could now be closed to silver, the present state of affairs might very well endure permanently; but, so long as the currency is being constantly "watered" by the addition to it every month of the paper equivalent of four and a-half million ounces of silver, the country is day by day drifting slowly but surely nearer to silver mono-

metallism. Even now there are signs of saturation. Observers say that gold has in a mysterious manner almost disappeared from the circulation (probably it is being hoarded), that it is giving way to silver in the bank-reserves, and that its expulsion from the Treasury is only a question of time. Hitherto, the marvellous growth of the country in population and wealth, combined with other favourable causes, has indefinitely postponed the evil day so often prophesied ; but the danger, none the less, looms large, and immediately a failure of crops or a period of stagnation is encountered, large masses of currency will be thrown out of employment, the Treasury will be inundated with silver, and the suspension of gold payments must then surely be inevitable.

III.

The par of exchange between the sovereign and the gold dollar is $4.86\frac{2}{3}$, arrived at as follows :—

$$\$? = £1$$

If $1869 = 40$ lbs. Troy Standard Gold

„ 1 = 5760 grains „ „

„ 12 = 11 „ Fine „

„ 9 = 10 „ U. S. Standard Gold

„ 25.8 = \$1

= $\$4.86\frac{2}{3}$ (or $49\frac{5}{16}$ d. for \$1)

To send gold from New York to London costs about $\frac{1}{2}$ per cent., and the import-point is 4.89 to 4.90; but the reverse operation entails a loss of interest, and gold does not leave us until the exchange recedes to 4.84 or 4.83. This difference is explained by the fact that, as there is no market in London for drafts on New York, the shipper from this side has to wait for return-remittances, while the New York exporter is able to recoup himself at once for his outlay by selling a cheque on his correspondent.

In illustration of the export-point we give a pro-formâ account of a shipment of specie to New York :—

13500 ozs. American Half-Eagles at 76/7 per oz....	£51693 15 0
Boxer, bags, packing, & cartage	2 11 0
Carriage to Liverpool	4 17 6
Freight	62 10 0
Brokerage	12 18 5
Insurance	75 17 6
Commission	25 18 6
	184 12 11
	£51878 7 11
Add loss of interest, say, 21 days at 3	89 10 10
	£51967 18 9
The average outturn of ozs. 13500 is ..	\$251240
251240	— 1 83½
	\$1967.95

Our current account with the United States is mainly composed of the following items :—

The United Kingdom in account with the United States.

Dr.	Cr.
To imports of produce, &c., (wheat, corn, cotton, petroleum, tobacco, metals, provisions, &c.)	By exports of manufactured goods.
,, Railway, and other, securities purchased.	, Interest and dividends on the American se- curities held here. , Securities bought back from us. , Freights. , The expenditure of American tourists.

and the exchange inclines in favour of whichever country has to receive payment on balance.

The relative value of money, which is so largely responsible for the movements of the chief European exchanges, produces scarcely any perceptible effect on the American rate, as the transfer of floating funds is hindered by the time occupied in transmission; and though, during the occasional "spasms of stringency," to which the New York

market is liable, short loans often command rates (as much as $\frac{1}{16}$ per cent. per day), that would appear likely to attract capital from abroad, it is known by experience that such pseudo-crises are wont to pass off as suddenly as they arise, and that in most cases they would be over before there was time to get supplies across. Capital seeking only temporary employment does not therefore, as a rule, travel so far as the States.

It will be noticed in the foregoing statement of mutual indebtedness that the claims on us of the United States, being principally for agricultural produce, must fall mainly into the autumn^a and early winter months, but that our counter-claims, being such as appertain to no one season of the year in particular, are presumably distributed pretty evenly over the whole twelvemonth; and it will be found, as a consequence, that on an average of years the exchange from August to December (see Diagram) is against us, but during the other months is in our favour. An export of gold from this side—if it is to take place at all—may generally be expected about the end of the harvest-season.

A withdrawal of bullion from the Bank for New York is always made more of in the market than a shipment to the Continent. The effect on the Reserve is in both cases the same, but in the one the gold is gone beyond recall, whilst in the other it is only at a day or two's remove, and can soon be had back again if we are willing to bid high enough for it. Considering, however, the magnitude of our trade with the States, the amount of bullion that actually passes between the two countries is much smaller than might be supposed, the bulk of the difference being usually settled by a transfer of Railway Bonds and Shares, of which a large number are saleable on both sides. It does not

^a The main crop, that of wheat, begins to move in July, but, owing to offers of paper drawn against it in advance, the exchange usually feels its influence a month earlier.

follow, therefore, because the balance of trade at a given time happens to be against us, that we shall have to liquidate it in gold. If bank-reserves be low in New York, and money dear, as much hard cash as is wanted is likely to be demanded from us; but if the surplus be satisfactory, and money cheap, America will probably adjust accounts by taking back some of her own securities, and the exchange will not be allowed to relapse to specie-point.

CHAPTER XII.

THE OPEN MARKET.

L.

Of all the articles bought and sold in the London markets it would be difficult to name any one the price of which is subject to greater and more sudden changes, or is liable to be influenced by circumstances more numerous and complicated, than is that of loanable capital or market-money.

From day to day, and sometimes almost from hour to hour, market-rate is constantly varying; and its movements are remarkable not only in point of frequency, but also for their width of range. To-day, for instance, the current charge for discounting a three-months' bank bill of £1000 may be £5, and a month hence may have fallen 40 per cent. to £3, or have risen 100 per cent. to £10.

This price, like that of other commodities, is dependent in the main on the equation of supply and demand, or, to be more exact, on the ratio between the amount of floating capital that lenders have available for immediate employment, and the amount that borrowers, who have good security to offer, are in immediate want of; but to render this definition intelligible it is necessary that we should first know, on the side of supply, what loanable capital consists of, how it is generally employed, and in what manner it becomes available for immediate use.

Market-money, roughly speaking, is other people's money. The general loan fund of the country is held by the banks, and is made up of customers' deposits, on which low interest is paid, and of customers' balances, on which, as a rule, no

interest at all is paid. If it were their own money that bankers lent out, the low rates that borrowers are accustomed to would be altogether out of the question. For the ten years, 1881 to 1890, the average market-rate for bank-paper was £2 14s. per cent. per annum, and it is obvious that if those who took in bills on these terms had been investing their own capital, they would have done far better to put it into Consols, and be rid of the worry of business. But the money so used is what has been lodged with the banker by his customers, and for the greater part of it—probably two-thirds or more—he pays nothing. Consequently he can afford, if “deposits” are large in proportion to capital, to lend very cheaply, and yet be able to secure a satisfactory profit. Some banks, indeed, hold customers’ money to as much as ten or fifteen times the amount of their paid-up capital, and could thus pay a fair dividend if it returned them no more than one per cent. net.

What the grand total of the “deposits” held by all the banks in the United Kingdom may amount to cannot be ascertained, but it is possible to estimate it with some approach to accuracy on the basis of the accounts published by the Joint Stock Banks. From these it appears that at the end of 1890 the Joint Stock Banks (exclusive of the Bank of England) were in possession of £540 millions of customers’ money, and we shall be under the mark, rather than over, if we tax the amount then held by the whole of the banks, private and joint-stock together, at upwards of £650,000,000.*

All this borrowed capital, with the exception of the varying proportion reserved to meet withdrawals, has to be made use of somehow; and from its very nature—being repayable on demand, or at short notice—must necessarily be laid out in securities that are realizable without difficulty or loss.

Now, of all such securities first-class bills of exchange

* *Economist*, May 23, 1891.

are, as there has been occasion to point out before, indisputably the safest and best. From the fact that they are self-convertible, turning into cash automatically and at par, they constitute next to actual money a first line of defence, and a strong portfolio is so indispensable to the safety of banking business that in every case a due proportion of bills forms a leading feature of the interest-bearing assets.

After bills, the next best outlet is to be found in advances for short fixed periods on good security; and in these two directions—bills and loans—a banker generally employs the bulk of his customers' money.

In the majority of balance-sheets the assets are not stated in sufficient detail to allow of analysis, or it would be interesting to know what average percentage is thus laid out; but the accounts for 1890 show that certain banks which then held £200 millions of deposits, &c., had invested £54 millions in bills, and £88 millions in loans and advances (the remainder being cash, money at call, Consols, &c., and miscellaneous items); and if we apply this proportion to the estimated total of, say, £650 millions, we get in round numbers, bills £175 and loans £286 millions. These figures are of course little better than mere conjecture, but they are quite near enough to serve the purpose of illustrating what is meant when we speak of the amount of floating capital that lenders have available for immediate use: for as it is evident that the money locked up in a bill is set free again as soon as the bill is paid, and as the average unexpired term of bills discounted may be taken as six weeks, it is not unreasonable to assume that out of the aforementioned £175 millions, nearly £30 millions would become disposable each week.

This then (putting loans aside) would constitute the immediately-available supply; and, as money coming out of bills would, as a rule, go back into bills, there would be thirty

millions per week seeking re-employment in the discount-market. If bills to that amount were not forthcoming, the discount-rate would fall; if an excess were offered, it would rise.

Supply is not limited, however, to the steady inflow of "old" money seeking re-investment. A pressure of "new" money frequently makes itself felt. The country in ordinary times earns much more than it spends, and the accretion of savings, unless carried off by an expansion of trade, aided by home and foreign loans, &c., flows into the banks, and from the banks into the market, until some approved opening can be found for it. In that case supply becomes redundant, and rates are forced down to a low and unhealthy level; but watchful company-promoters quickly bestir themselves to improve the opportunity, and there are always impecunious foreign states ready, whenever money is plentiful, to invite our assistance in the exploitation of their "vast undeveloped resources," until, by one means or another, the surplus is absorbed into permanent investments, and the equipoise of supply and demand is re-established.

So much for the question of supply. As regards the general demand for loanable capital, it consists, as was said, of the immediate requirements of those who have acceptable security to offer; and by discount-demand, to which branch we for the present confine our attention, is to be understood the quantity of *good* bills that borrowers are desirous of at once converting into cash. Those borrowers are the merchants and manufacturers of the country, and the extent of their requirements varies with, and is dependent upon, the state of trade; for as the settlement of business transactions (especially those with foreign countries) is chiefly effected by means of bills, it follows that the greater the volume of current dealings, the greater will be the number

of bills to which they give rise, and the greater also the quantity tendered for discount.

Creation of more paper is not, however, the only effect of better business. It also implies that the number of bills brought to market will bear a higher proportion than hitherto to the total in existence. Seeing that, when orders are coming in freely, traders are always anxious to turn over their capital as fast as possible, and to discount every remittance as soon as received, in order to employ the money in fresh purchases, and that, on the other hand, they try, when there is "nothing doing," to avoid the accumulation of an idle cash-balance by discounting no more than is necessary to meet previous engagements, it is evident that improvement of trade signifies a relative as well as an actual increase of demand.

More trade therefore means more bills, larger calls on supply, and higher rates; less trade means fewer bills, a falling-off in demand, and lower rates.

The demand for money is thus the summary and product of all the complex influences that affect the present condition or the future prospects of commercial industry, either as a whole or in any of its branches, and, as such, is incessantly fluctuating,* and with it the discount-rate. From its nature it can only be treated of in the abstract. No figures are available that will enable us to gauge the quantity of bills that are likely to come forward next week or next month. If the Board of Trade Returns, the Clearing-House Returns, the Railway Goods-Traffic Returns, &c., all tell the same story of an increase, we know for certain that trade is improving, and that next week or next month the demand will have grown; but what the growth will be, or just when it will begin to be felt, is what we cannot know for certain. And besides, the conditions under

* It is almost entirely to the variations in the demand for loanable capital that the constant changes of rate are due. Supply may, by comparison, be regarded as an almost constant quantity.

which business is carried on are gradually changing. There is reason to believe that each year more and more transactions are conducted on a cash-basis, and that the number of bills now created bears a steadily diminishing ratio to the volume of commerce. Instead of settlement by bill, a growing preference appears to be shown for settlement by cheque or by cable-transfer—a means of payment that avoids the uncertainties of a fluctuating discount-rate, saves the cost of bill-stamp, and reduces the risk of loss to a minimum. Scarcity of bills (partly comparative, owing to the growth of the loan-fund) is indeed a long-standing grievance with lenders, and is substantiated by the fact that bankers generally now hold fewer bills in proportion to other assets than was the case in former years. Here, for instance, is a comparison between the portfolio and the customers' money of two of the largest Metropolitan Banks for the years 1882-90:—

	A			B		
	Deposits, &c.	Bills.	Per cent.	Deposits, &c.	Bills.	Per cent.
Dec. 1882	26.2 millions	11.0 millions	42	12.8 millions	4.9 millions	38
" 1883	27.3	11.1	41	13.0	4.9	38
" 1884	27.0	10.5	39	11.9	3.5	30
" 1885	27.6	10.2	37	12.3	4.1	33
" 1886	29.1	11.1	38	12.3	3.6	29
" 1887	29.2	11.0	38	12.5	3.1	25
" 1888	31.4	11.5	37	12.8	3.9	30
" 1889	33.0	12.6	38	11.0	4.6	33
" 1890	33.8	11.6	31	13.6	4.0	30

In both cases, it will be observed, the percentage of bills has decreased, and it is probable that the difficulty experienced by these two banks in keeping up the proportion has been experienced by all.

Next to the interaction of supply and demand, the chief influence that governs market-rate is the rise and fall of the official minimum. As we already know, there is a necessary connection between the two, inasmuch as bankers still adhere to the old usage of regulating their allowance on

deposits by Bank-rate. If Bank-rate is raised, the deposit-rate has to be raised, and it stands to reason that if the banker pays more for what he borrows he will try to obtain more for what he lends. It does not follow, though, that he will be compelled to raise his charge *pari passu* with his allowance, for he pays interest only on part of his borrowed capital, not on all, and if out of every £100 that he holds he pays interest on £40, and lends £80, thus :—

LIABILITIES.	ASSETS.
Interest-bearing deposits £40	Interest-bearing loans
Current-account balances 60	and discounts ... £80
Cash, &c.	20
£100	£100

then an advance of 1 per cent. in his allowance on the £40 will be made up to him by an advance of $\frac{1}{2}$ per cent. in his charge on the £80.

When the Bank goes up, therefore, the market follows; and further, if there should exist good ground for anticipating an upward movement, the outside-rate will take the lead. Why the market grows firmer when gold goes out, for instance, is not so much because the removal of a quarter or half a million makes any appreciable difference in supply, but rather because the possible consequence of a reduction in the Reserve has the effect of making lenders more cautious, and borrowers more eager.

As a matter of course, a fall of the official minimum is always attended by a fall of market-rate; but, as regards the advance, it is necessary to distinguish between a movement due to real, and one due to artificial causes. Bank-rate may be raised in consequence of an increased demand, which is a real cause, or it may be raised quite irrespective of the actual value of money, simply to check a drain of

gold, and protect the Reserve. In the former case the Bank and the market rise in unison, because the same cause acts on both; but in the latter the Bank alone is really concerned, and though other dealers may endeavour, on the strength of the official announcement, to exact a higher charge, supply soon proves too much for them, and they are forced to reduce their pretensions. On such occasions there is frequently a very wide disparity between the two quotations, and if it were not for the dependence of deposit-rate on the Bank the difference would be even wider.

For the ten years 1881-90 the average Bank-rate was about £3 9s. 8d., and the average Market-rate about £2 14s., a proportion of 77½ per cent. The details are shown in Diagrams Nos. 17 and 18.

It will be observed that the difference is greatest when rates are at their lowest, the reason being that, while the Bank draws the line at 2 per cent, the market, rather than keep money unemployed, will lend at almost any price, and sometimes quotes as low as $\frac{3}{4}$ per cent. The narrowing of the margin in February-March is due to the collection of Income Tax, &c., but the noticeable advance of the percentage at the beginning of August is not easily explained.

There is one other factor that enters into the composition of discount-rates, and that is credit. In every loan-operation the lender, before fixing a rate, has to decide for himself whether there is reasonable certainty of repayment at the stipulated time, and of repayment in full. If quite satisfied on both points, he charges only for the use of the money and for his trouble, but, if there is any room for doubt in the matter, he also charges for his risk, and thus makes the borrower pay an insurance-premium in addition.

This variable element is usually absent from the best market-rate, only making its appearance in times of disturbance, when the general disinclination to lend on any

security whatsoever causes an all-round advance, but its effects are distinctly visible in the great diversities of charge that are always in co-existence side by side : for loanable capital has as many different values as there are degrees of credit, and between the 60 per cent. charged by the loan-office, the 10 per cent. charged by the country bank, and the 2 per cent. charged by Lombard Street there are innumerable gradations, all dependent upon the supposed solvency of the borrower, and on the lender's appraisement of the danger that he incurs in parting with his money.

II.

No reference has yet been made to the very important part performed in the economy of the discount-market by the middleman, through whom, in practice, nearly the whole of the better class of business is transacted.

At first sight, the need of an intermediary may not be apparent : and, from the fact that every banker discounts for customers as part of his regular business, it would be natural to infer that the stock of bills shown in his balance-sheet had been acquired at first hand. Generally speaking, however, it is not so. Inferior paper may, and does, go direct to the banker, especially in the provinces, but the bulk of the superior sort, of the bank- and best trade-bills, passes through the hands of the London "bill-brokers" (or bill merchants, as it would be more correct to designate them) and discount-houses, which include three joint-stock companies with large capitals and many private firms, some of whom are of great wealth and undoubted standing.

The broker's business is to buy from merchants and to resell to bankers ; and, as his turnover is usually on an enormous scale, a very small difference in the rate is sufficient to remunerate him.

So far as the Country banker is concerned some such arrangement is obviously necessary, as bills of the class that

he requires for his portfolio are not to be had in quantity outside London; but, as regards the London banker, it needs explanation to understand why he should buy from a broker rather than treat with holders direct.

It is simply a question of division of labour. Bill-discounting is really a trade by itself, and a trade that requires extensive knowledge of a very special kind. The discounter must have the financial and moral standing of hundreds of commercial houses at his fingers' ends. He has to find out, if possible, who X is, and what his antecedents are; whether he speculates, or accepts too much; whether he was involved in the recent failure, or has lost by the fall in copper or silver, and so on; and, according to the mental estimate which he thus forms of the state of X's affairs, he is guided as to the amount of X's acceptances that it is safe to hold.^a And further, unless his mental estimate is kept posted up to date it soon becomes useless, so that he must always be on the alert for fresh information. Knowledge of this sort, it is evident, can only be acquired by long experience and the exercise of great judgment; and the broker, to whom it is of vital importance, gives his whole mind to it. But a banker has no time to devote to its intricacies. He has quite enough to do to look after his own customers without having to make enquiries about the acceptor of every bill that he holds; and so, for the sake of a fractional difference in the rate, he is only too glad to save trouble by buying from a broker, who takes the risk upon himself, and whose wealth guarantees immunity from loss by bad debts. This only applies, however, to the larger brokers and to the companies. If the banker buys from the small men he practically takes the risk himself.

The other party to the bargain—the holder of the bill—also derives benefit from the arrangement, as the broker,

^a In a word, he must know men and their means, in order that he may be able to tell a good bill from a bad one.

under the stimulus of competition, gives him a better rate than he could obtain from his own banker; and as the great merchants of Manchester, Liverpool, &c., as well as those in London, offer the pick of their remittances in Lombard Street, the result is that all the best paper in the country comes to the one and only market.

The brokers are also dealers in floating money. A banker keeps a certain amount of till-money, which varies little, and a certain balance at the Bank of England (or, in the case of a Country bank, at the London agent's) which also varies little, but his fluctuating surplus of cash he lends to a broker, who allows him interest on it, deposits collateral security,* and undertakes to pay at a moment's notice.

This "call-money" the broker employs in the discount of bills, and, as every shilling of it bears interest, every shilling must likewise earn interest or bring a loss. Consequently, he cannot afford to keep much of a reserve; and as a matter of fact, he makes no serious provision for withdrawals, but relies on being able to repay by letting his bills run off, or, in case of need, by borrowing at the Bank.

It is of course evident that, under ordinary circumstances, the incomings on any particular day of the brokers as a body must about balance the outgoings, as the amount "called" by those bankers who are "short," makes those to whom it is transferred "over," and is lent out again by the latter. But it also frequently happens that money is taken clean out of the market. When, for instance, bankers are preparing for dividend and coupon-payments, &c., they find it necessary to strengthen their balances, and the money "called" for that purpose has to remain locked up for a day or two. The brokers are then compelled to seek assistance at the Bank, which, if the applications are heavy,

* The practice of requiring security for money deposited with the Bill-brokers is said to date from the failure of the Overends, who held millions against their mere acknowledgment.

sometimes takes advantage of the situation by raising the charge for loans to perhaps one per cent. over Bank-rate, so that the broker then stands in the peculiar position of having to borrow at perhaps five per cent. with one hand, while at the same time taking in bills from his customers at $3\frac{1}{2}$ per cent. or 4 per cent. with the other.* It may be mentioned, in passing, that, for many years, the Bank refused to help the brokers by re-discounting for them,^b but has recently relaxed the rule and now takes bills that have only a few days to run.

An increase of the "Other Securities," showing that recourse has been had to the Bank, sometimes affords a good clue to the course of the market, as it proves that the outside supply of money is running short.

In addition to day-to-day money, brokers hold large deposits at short notice; and, like the banks, base their deposit-rate on the Bank-rate. Unlike the banks, however, they have not the good-fortune to get money for nothing; and, as they make their profit out of the difference between the rate at which they borrow and the rate at which they lend—that is to say, out of the difference between deposit-rate and market-rate—they have to submit to a great reduction of profit, if not to actual loss, whenever the disparity between market-rate and bank-rate is wider than usual. An accusation that is frequently levelled at the bill-brokers as a body is that of "beating down" rates and thus rendering the Bank-rate inoperative; but it is obvious from the foregoing that the interest of the chief houses, which hold large deposits, lies in just the opposite direction. The real culprits, it is far more likely, are the banks themselves, who, rather than keep money lying idle, offer it at constantly

* Whatever the broker may be paying for money, he cannot possibly refuse to discount for regular customers, and he is always expected to quote below bank-rate.

^b This rule was made in 1858, and was a direct consequence of the panic of the previous year.

decreasing prices through the small brokers. These have not the capital to hold more than a mere fraction of the bills they purchase, and simply act as agents, collecting them for their principals and paying themselves by an infinitesimal difference in the rate.

III.

However suitable bills may be as an investment for loanable capital, the outlet thereby provided is totally inadequate to carry off even a moiety of the hundreds of millions for which employment has to be found; and the banker, being forced to look elsewhere for means to mobilize the greater part of his customers' money, resorts, as was already stated, to Loans and Advances, which, in point of magnitude, constitute his principal asset. These are divisible into two classes :—

- (a) Miscellaneous Advances, such as overdrafts, loans to traders and others on personal security, or against the pledge of bills of lading, dock-warrants, title-deeds, &c., and
- (b) Loans on the London Stock Exchange.

The first-mentioned may be dismissed in a few words. Being transactions of a special nature, each application is dealt with on its merits, and the rate charged by the banker for the accommodation varies according to the circumstances of the case, but is usually based upon bank-rate.

As regards the second class, there still remains, after every legitimate demand of commerce has been duly met, a very large surplus to place out, and the whole of this surplus, practically speaking, is disposed of in loans from fortnight to fortnight on the London Stock Exchange. The attraction presented by this mode of employment lies in the fact that while involving little risk or trouble, it yields a relatively high return. For the years 1887 to 1891, to quote instances, the average rates charged to stockbrokers were :—

1857	...	...	£3	7	9	per cent. p.a.
1858	...	...	£3	5	6	" "
1859	...	...	£3	10	9	" "
1860	...	...	£4	13	6	" "
1861	...	...	£3	2	8	" "

the mean being about the same as the average bank-rate for that period.

From the banker's point of view a loan to the House is a very simple and easily-managed affair. On the morning of Contango-Day (the first of the three days over which the settlement extends) he informs his broker or brokers how much he has to lend, and negotiates as to the rate; on the following day the broker renders a statement of the securities that he proposes depositing—or rather, pledging—with the banker as cover for the loan; and on Pay-Day the securities are handed in, and a cheque given. It is customary to insist on a marginal reserve of not less than 10 per cent. in the cover (that is to say, for every £1000 lent the banker expects to receive securities worth at least £1100), and the rule is observed of valuing all securities at the so-called "making-up" price, which is officially fixed for each stock at every settlement. The loans invariably run from one settling-day to the next, and a renewal is treated in every respect as a fresh transaction, the securities being revalued at the new making-up price, and additional cover given if the value has fallen below the limit. As the banker holds the stock simply as pawnee, the property in it remaining with the borrower, all dividends and due coupons belong to the latter, as well as the advantage, if any, derived from drawings.

The ultimate destination of this borrowed money is to pay for stock that has been bought by speculators for the rise. In a certain sense, every buyer of stock is a speculator for the rise, inasmuch as no one buys a stock that he thinks

will fall, but the term is usually applied only to those who cannot go on holding what they have bought unless they can continue to borrow, or, in other words, to those who buy what they cannot pay for. As is well known, the bulk of the transactions that take place on the Stock Exchange are of a speculative nature, the bona-fide business having been estimated by competent judges at a bare five per cent. of the whole.

If then the speculative buyer, or "bull," whom we will assume to be one of the outside public, does not intend to pay for and take delivery of his purchase on settling-day, he tells his broker to "carry over" the bargain until the next account. The broker is not bound to do so, however. He has the right to insist on payment if he pleases, or in default to resell the stock and charge his client with the difference; but the right is rarely exercised (unless he is prepared to lose his customer), and, if instructed to "carry over," he does so as a matter of course. Anyone unacquainted with the practice of the Stock Exchange might suppose that the broker would now proceed to ascertain for the information of the buyer whether and on what terms the inside dealer (or "jobber," as he is called), who had sold the stock, was willing to put off delivery for a fortnight, till the next settling day. But this procedure, though it appears the natural and proper method of arranging the postponement, would give rise to endless trouble and delay; and what actually occurs is that the broker, instead of opening up negotiations with the seller, simply pays for the stock himself on delivery, and raises the money by pawning the same or other securities with a banker.

The banker, therefore, ultimately pays for and holds the stock bought by the "bull."

If the speculator, instead of being an outsider, is a member of the House, he buys direct from the "jobber,"

and it is then the latter who has to "carry over." This is effected either out of his own resources, or, as before, by pawning the stock. In the latter case he may borrow direct from his banker, or he may employ the agency of one of the large brokers, who in this respect act, as it were, as agents for the banks, and charge the jobber a trifle more than they pay themselves—the jobber finding the margin.

The charge made to the speculator by the broker or jobber for "carrying over" (technically known as the "contango") is dependent on several considerations; for, though ruled to a great extent by the value of money—interest being its elemental factor—it also varies according to the volume of speculation open for the rise, according to the more or less risky character of the security sought to be "continued," and according to the supposed ability of the speculator to meet an eventual loss. As it must be taken too to include the broker's remuneration for pledging his credit, as well as for the use of the ten per cent. margin that he provides, and for his time and trouble, it is naturally always more than the banker receives.

Besides speculation for the rise, there is another purpose for which money is borrowed by the Stock Exchange. Whenever it can be had cheaply, very large sums are laid out in dividend-paying securities, with a view to realize the margin between the interest they yield and the rate charged for the loan. Thus, if a dealer can borrow at say $2\frac{1}{2}$ per cent., it will pay him very well to buy a four per cent. stock at par, and to impledge it on a ten per cent. margin, the operation working out as follows:—

on £1100 stock he receives at the rate of	£44 per annum.
and on £1000 borrowed thereagainst pays	25 ,,
showing a profit at the rate of	... ... £19 per annum.

on each £100 of net outlay. Until the rate begins to rise, this is very satisfactory, but immediately it goes above four per cent., he must either face a loss or sell out; and it is on the realisation that the actual result depends, for, if the stock should have declined in value since he bought, the prospective profit may be greatly curtailed or even disappear altogether.

Why the price of money should exert influence over the stock-markets, as everyone knows it does, is now easily perceived. Securities rise when money is cheap, not only because the low return obtainable on capital employed in the outer market induces purchases for investment, but also because those yielding a fixed rate of interest are largely bought on borrowed funds in order to secure the margin of profit, as just explained; and also because light contangoes are in themselves an incentive to speculation for the rise. When money grows dear, on the other hand, prices give way from the opposite causes: that is to say, because capital can then be employed so advantageously in other directions that investment-buying falls off, and because those who previously bought on borrowed money—whether for the sake of the interest-difference or as a “bull” speculation—are forced into realisation by the onerous charges. In securities of the class favoured by speculators it consequently happens that important fluctuations are sometimes assigned to causes that appear singularly far-fetched and irrelevant (a fall in American Railway Shares may perhaps be ascribed to a decline of the Paris cheque-rate, or to an advance of the Berlin bank-rate), but that are quite intelligible if the principle of this relationship is borne in mind, and if it is remembered that the missing-link in the connection is the effect that operators expect to see produced in the value of loanable capital.

**EPPINGHAM WILSON AND CO.,
11, ROYAL EXCHANGE, LONDON, E.C.**

